619-E-3

APR 15 1988

I 19.[illegible]/2:AZ-88

Da

CALENDAR FOR WATER YEAR 1985

1984

OCTOBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

NOVEMBER

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

DECEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

1985

JANUARY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

MARCH

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

APRIL

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MAY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

AUGUST

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

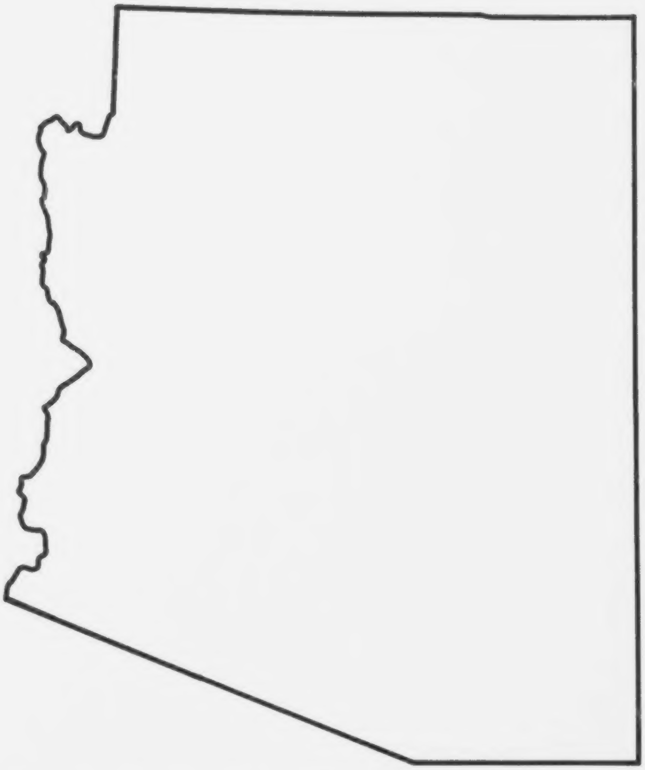
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

1912

Water Resources Data Arizona
Water Year 1985

by Natalie D. White, and W.B. Garrett



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AZ-85-1
Prepared in cooperation with the State of Arizona
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD P. HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Arizona write to
District Chief, Water Resources Division
U.S. Geological Survey
300 W. Congress Street FB-44
Tucson, Arizona 85701-1393

1988

PREFACE

This volume of the annual hydrologic data report of Arizona is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

S. C. Jones
George W. Hill
Edmund G. Nassar
Howard F. McCormack

Patricia D. Rigas typed the text of the report.

This report was prepared in cooperation with the State of Arizona and with other agencies under the general supervision of R. D. Mac Nish, District Chief, Arizona.

50272-101

REPORT DOCUMENTATION PAGE

1. REPORT NO. USGS/WRD/HD-88/215

2.

3. Recipient's Accession No.

4. Title and Subtitle

Water Resources Data for Arizona, 1985

5. Report Date January 1988

6.

7. Author(s)

8. Performing Organization Rept. No. USGS-WDR-AZ-85-1

9. Performing Organization Name and Address

U.S. Geological Survey
Federal Building, 300 West Congress Street FB-44
Tucson, Arizona 85701-1393

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.
(C)
(G)

12. Sponsoring Organization Name and Address

U.S. Geological Survey
Federal Building, 300 West Congress Street FB-44
Tucson, Arizona 85701-1393

13. Type of Report & Period Covered
Annual--Oct. 1, 1984
to Sept. 30, 1985

14.

15. Supplementary Notes

Prepared in cooperation with the State of Arizona and with other agencies.

16. Abstract (Limit: 200 words)

Water resources data for the 1985 water year for Arizona consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; water levels of observation wells; and quality of ground water. This report contains discharge records for 186 gaging stations, annual peaks for 24 crest-stage partial-record stations, and discharge measurements at 7 miscellaneous sites; contents only records for 8 lakes and reservoirs; stage and contents for 1 lake; elevation only for 1 streamflow station; 18 supplementary records, included with gaging-station records, consisting of monthend or monthly stage, contents, and evaporation of lakes and reservoirs, diversions, and return flows; water-quality records for 34 continuous-record stations and 5 miscellaneous sites; water levels for 95 observation wells; and water-quality data for water from 230 wells. The data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating Federal and State Agencies in Arizona.

17. Document Analysis a. Descriptors

*Arizona, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediment, Water temperatures, Sampling sites, Water levels, Water analyses.

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement: No restriction on distribution
This report may be purchased from:
National Technical Information Service
Springfield, VA 22161

19. Security Class (This Report) UNCLASSIFIED

20. Security Class (This Page) UNCLASSIFIED

21. No. of Pages 355

22. Price

(See ANSI-Z39.18)

See Instructions on Reverse

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

CONTENTS

Page

Preface III
List of gaging stations and water-quality stations, in downstream order, for which records are published VII
Introduction 1
National Water Information System 2
Cooperation 2
Hydrologic conditions 3
Definition of terms 5
Downstream order and station numbers 16
Numbering system for wells and miscellaneous sites 16
Special networks and programs 19
Explanation of stage and water-discharge records 20
    Collection and computation of data 20
    Publication of data 22
    Accuracy of field data and computed results 25
    Other data available 25
    Records of discharge collected by agencies other than the Geological Survey 26
Explanation of water-quality records 26
    Collection and examination of data 26
    Water analysis 26
    Water temperature 27
    Sediment 27
Explanation of ground-water level records 28
    Collection and publication of the data 28
Publications on techniques of water-resources investigations 29
Hydrologic-data station records 33
Discharge at partial-record stations and miscellaneous sites 299
    Crest-stage partial-record stations 299
    Discharge measurements at miscellaneous sites 302
Analyses of samples collected at miscellaneous sites 303
Water levels in selected wells in ground-water areas in Arizona 310
Quality of ground water 318
Index 339

ILLUSTRATIONS

Page

Figure 1. Graph showing runoff during 1985 water year compared with median runoff for period 1951-80 for three representative gaging stations 6

2. Diagram showing system for numbering wells and miscellaneous sites 17

3. Diagram showing well-numbering system in Arizona 18

4. Map of Arizona showing location of gaging stations 31

5. Map of Arizona showing location of water-quality stations 32

6. Schematic diagram showing gaging stations and water-quality stations on streams, diversions, and return flows between Imperial Dam and the southerly international boundary 264

7. Map of Arizona showing location of partial-record gaging stations 298

8. Index map of ground-water areas in Arizona......... 308

GAGING STATIONS AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letters after station name designate type of data: (c) chemical; (d) discharge; (e) elevation; (g) gage height; (m) microbiological (bacteria); (p) pesticide; (q) specific conductance (daily); (r) radiochemical; (s) suspended sediment; (t) water temperature (daily); (v) contents]

Page

COLORADO RIVER BASIN
Colorado River:
SAN JUAN RIVER BASIN
San Juan River:

Chinle Creek near Mexican Water (d) 33
Lake Powell at Glen Canyon Dam (v) 34
Colorado River at Lees Ferry (c,d,m,q,s,t) 35

PARIA RIVER BASIN

Paria River at Lees Ferry (d) 42
Colorado River at Compact point, near Lees Ferry (d) 43

LITTLE COLORADO RIVER BASIN

Little Colorado River above Lyman Lake, near St. Johns (d) 44
Little Colorado River above Zion Reservoir, near St. Johns (c,d) 45
Zuni River above Black Rock Reservoir, NM (d) 47

Silver Creek:

Show Low Creek near Lakeside (d) 48
Show Low Creek below Jaques Dam, near Show Low (d,v) 50
Silver Creek near Snowflake (d) 52
Little Colorado River at Woodruff (d) 53
Puerco River near Chambers (d) 54
Little Colorado River near Joseph City (d,s) 55

East Clear Creek (head of Clear Creek):

Blue Ridge Reservoir near Pine (v) 57
Clear Creek below Willow Creek, near Winslow (d) 58
Little Colorado River at Cameron (c,m,s) 59
Moenkopi Wash at Moenkopi (d) 61
Little Colorado River near Cameron (d) 62
Colorado River near Grand Canyon (c,d,q,s,t) 63

KANAB CREEK BASIN

Kanab Creek near Kanab, UT (d) 68

VIRGIN RIVER BASIN

Virgin River at Littlefield (c,d,q,t) 69
Virgin River above Halfway Wash near Riverside, NV (c,m,s) 73

LAS VEGAS VALLEY

Las Vegas Wash near Henderson, NV (c,d,s) 75

GAGING STATIONS AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER—Continued

COLORADO RIVER BASIN—Continued

LAS VEGAS VALLEY—Continued

Page
Las Vegas Wash near Boulder City, NV (c,m,q,s,t) 78
Lake Mead at Hoover Dam, AZ-NV (c,v) 83
Colorado River below Hoover Dam, AZ-NV (c,d,m,q,s,t) 91
Lake Mohave at Davis Dam, AZ-NV (v) 97
Colorado River below Davis Dam, AZ-NV (c,d,q,s,t) 98
Colorado River at Needles, CA (e) 104

DIVERSIONS AND RETURN FLOWS BETWEEN DAVIS DAM AND PARKER DAM

Topock Marsh Inlet near Needles, CA (d) 105

Lake Havasu:

DIVERSIONS FROM LAKE HAVASU

Colorado River aqueduct near Parker Dam, AZ-CA (d) 106

BILL WILLIAMS RIVER BASIN

Big Sandy River (head of Bill Williams River):

Burro Creek:

Francis Creek near Bagdad (d) 107
Burro Creek at Old U.S. 93 bridge near Bagdad (d) 108
Big Sandy River near Wikieup (d) 109
Santa Maria River near Bagdad (d) 110
Bill Williams River below Alamo Dam (d) 111
Bill Williams River at Mineral Wash near Planet (c,m,s) 112
CAP Canal Havasu Pumping Plant near Parker (d) 114
CAP Canal at MP 7.9 near Parker Dam (c) 115
CAP Canal at MP 162.3 at 7th Street, at Phoenix (c,m,s) 116
Lake Havasu near Parker Dam, AZ-CA (e,v) 118
Colorado River below Parker Dam, AZ-CA (c,d,m,q,s,t) 120

DIVERSIONS AND RETURN FLOWS BETWEEN PARKER DAM AND PALO VERDE DAM

Colorado River Indian Reservation Main Canal near Parker (d) 126
Palo Verde Canal near Blythe, CA (c,d,s) 127
Colorado River at Palo Verde Dam, AZ-CA (d) 129

DIVERSIONS AND RETURN FLOWS BETWEEN PALO VERDE DAM AND IMPERIAL DAM

Cibola Lake Inlet near Cibola (d) 130
Cibola Lake Outlet near Cibola (d) 130
Colorado River below Cibola Valley (d) 131
Colorado River above Imperial Dam, AZ-CA (c,d,m,q,t) 132
Colorado River below Imperial Dam, AZ-CA (d) 138
Colorado River below Laguna Dam, AZ-CA (d) 139

COLORADO RIVER BASIN—Continued

GILA RIVER BASIN

Page
Gila River near Gila, NM (d) 140
Gila River near Redrock, NM (d) 141
Gila River below Blue Creek, near Virden, NM (d) 142
Gila River near Clifton (d) 143
San Francisco River near Reserve, NM (d) 144
San Francisco River near Alma, NM (d) 145
San Francisco River near Glenwood, NM (d) 146
Blue River near Clifton (d) 147
San Francisco River at Clifton (d) 148
Eagle Creek:
Willow Creek:
Willow Creek diversion from Black River, near Morenci (d) 149
Eagle Creek above pumping plant, near Morenci (d) 150
Bonita Creek near Morenci (d) 151
Gila River at head of Safford Valley, near Solomon (d) 152
Gila River at Calva (c,d,m,s) 153
San Carlos River near Peridot (d) 157
San Carlos Reservoir at Coolidge Dam (v) 158
Gila River below Coolidge Dam (d) 159
Gila River at Winkelman (d) 160
San Pedro River at Charleston (d) 161
San Pedro River near Tombstone (d) 162
San Pedro River near Redington (d) 163
Aravaipa Creek near Mammoth (d) 164
San Pedro River below Aravaipa Creek near Mammoth (c,m,s) 165
Gila River at Kelvin (d,s) 167
Florence-Casa Grande Canal near Florence (d) 169
Gila River near Laveen (d) 170
Santa Cruz River near Lochiel (d) 171
Santa Cruz River near Nogales (d) 172
Santa Cruz River at Continental (d) 173
Canada del Oro near Oracle Junction (d) 174
Santa Cruz River near Laveen (d) 175
Black River (head of Salt River):
Black River below pumping plant, near Point of Pines (d) 176
Black River near Fort Apache (d) 177
North Fork White River near McNary (d) 178
East Fork White River near Fort Apache (d) 179
White River near Fort Apache (d) 180

GAGING STATIONS AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER—Continued

COLORADO RIVER BASIN—Continued

GILA RIVER BASIN—Continued — Page

Salt River:

- Carrizo Creek:
  - Corduroy Creek:
    - Forestdale Creek:
      - Forestdale Creek diversion from Show Low Creek, near Show Low (d) 181
  - Carrizo Creek near Show Low (d) 182
- Salt River near Chrysotile (d) 183
  - Cibecue Creek near Chrysotile (d) 184
  - Cherry Creek near Globe (d) 185
  - Pinal Creek at Inspiration Dam near Globe (c,d,s) 186
- Salt River near Roosevelt (c,d,m,s) 190
  - Tonto Creek:
    - Rye Creek near Gisela (d) 194
  - Tonto Creek above Gun Creek, near Roosevelt (d) 195
- Reservoir system on Salt River at and below Roosevelt Dam (v) 196
- Salt River below Stewart Mountain Dam (c,d,m,q,s,t) 197
  - Big Chino Wash (head of Verde River):
    - Williamson Valley Wash near Paulden (d) 202
  - Verde River near Paulden (d) 203
  - Verde River near Clarkdale (d) 204
    - Oak Creek at Sedona (d) 205
    - Oak Creek near Cornville (d) 206
      - Montezuma Well Outlet near Rimrock (d) 207
      - Dry Beaver Creek near Rimrock (d) 208
    - West Clear Creek near Camp Verde (d) 209
    - Fossil Creek:
      - Fossil Creek diversions to Childs powerplant, near Camp Verde (d) 210
    - East Verde River:
      - East Verde River diversion from Clear Creek, near Pine (d) 211
    - East Verde River near Childs (d) 212
    - Wet Bottom Creek near Childs (c,d,m,r,s) 213
  - Verde River below Tangle Creek, above Horseshoe Dam (c,d,m,s) 216
  - Reservoir system on Verde River at and below Horseshoe Dam (v) 220
  - Verde River below Bartlett Dam (c,d,m,q,s,t) 221
    - Sycamore Creek:
      - West Fork Sycamore Creek above McFarland Canyon, near Sunflower (d) 225
      - East Fork Sycamore Creek near Sunflower (d) 226
    - Sycamore Creek near Fort McDowell (d) 227

GAGING STATIONS AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER—Continued

COLORADO RIVER BASIN—Continued
GILA RIVER BASIN—Continued
Salt River—Continued
Verde River—Continued
East Verde River:

	Page
Diversions for city of Phoenix from Salt and Verde Rivers, near Fort McDowell (d)	228
Verde River near Scottsdale (d)	229
Diversions from Salt River at Granite Reef Dam (d)	230
Diversions for city of Phoenix from Arizona Canal, at Phoenix (d)	231
Salt River tributary in South Mountain Park, at Phoenix (d)	232
Cave Creek below Cottonwood Wash near Cave Creek (d)	233
Cave Creek at Phoenix (d)	234
Agua Fria River near Mayer (d)	235
Turkey Creek (head of Black Canyon Creek) near Cleator (d)	236
Agua Fria River near Rock Springs (c,d,m,s)	237
Boulder Creek near Rock Springs (d)	241
Humbug Creek near Castle Hot Springs (d)	242
Cottonwood Creak near Waddell Dam (d)	243
Agua Fria River at Waddell Dam (d)	244
Lake Pleasant at Waddell Dam (v)	245
Agua Fria River below Waddell Dam (c,m,s)	246
New River near Rock Springs (d)	248
Skunk Creek near Phoenix (d)	249
Hassayampa River near Morristown (d)	250
Hassayampa River near Arlington (d)	250
Centennial Wash at Southern Pacific Railroad bridge near Arlington (d)	250
Gila River above diversions, at Gillespie Dam (c,d,m,s)	251
Gila River below Gillespie Dam (d)	256
Gila River below Painted Rock Dam (d)	257
Gila River near Mohawk (d)	258
Gila River near Dome (c,d,m,q,s,t)	259
Colorado River below Yuma Main Canal wasteway, at Yuma (d)	263
Colorado River at northerly international boundary above Morelos Dam, near Andrade, CA (c,d,m,q,r,s)	265
Colorado River at southerly international boundary, near San Luis (d)	270

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

	Page
Diversions at and below Imperial Dam, AZ-CA (d)	271

COLORADO RIVER BASIN—Continued
GILA RIVER BASIN—Continued
DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM—Continued

Page
Gila Gravity Main Canal at Imperial Dam, AZ-CA (d) 275
All-American Canal near Imperial Dam, AZ-CA (d) 276
Yuma Main Canal at siphon-drop powerplant, near Yuma (d) 277
Yuma Main Canal wasteway at Yuma (d) 278
Yuma Main Canal below Colorado River siphon, at Yuma (d) 279
Pilot Knob powerplant and wasteway near Pilot Knob, CA (d) 280
All-American Canal below Pilot Knob wasteway, CA (d) 281
Return surface flows below Imperial Dam, AZ-CA (d) 282
Wellton-Mohawk Main Outlet drain near Yuma (q,t) 289

RIO SONOYTA BASIN
SAN SIMON WASH BASIN

San Simon Wash near Pisinimo (d) 293
Vamori Wash at Kom Vo (c,d,m,s) 294
Quitobaquito Spring near Lukeville (d) 296

SULPHUR SPRING VALLEY
WHITEWATER DRAW BASIN

Leslie Creek near McNeal (d) 297

WATER RESOURCES DATA FOR ARIZONA, WATER YEAR 1985

INTRODUCTION

Water resources data for the 1985 water year for Arizona consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; measurements of ground-water levels; and quality of water from selected wells. Also included are discharge data for crest-stage partial-record stations and water-quality data for partial-record stations. Locations of the gaging stations are shown in figures 4, 6, and 7, and of water-quality stations in figures 5 and 6. Additional water data were collected at various sites, which are not part of the systematic data-collection program, and are published as miscellaneous measurements or miscellaneous water-quality analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Arizona.

Records of discharge or stage of streams and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." These water-supply papers were in an annual series through water year 1960 and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the University of Arizona, Arizona State University, and the State of Arizona in Phoenix; principal cities in the United States; or may be purchased from the U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, Colorado 80225.

For water years 1961-74, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. For water years 1964-74, water-quality records were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report AZ-85-1." Water-data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

Information for ordering specific reports and data retrievals may be obtained from the district chief at the address given on the back of the title page or by telephone (602) 629-6671, FTS 762-6671.

NATIONAL WATER INFORMATION SYSTEM

Several components of the National Water Information System (NWIS) were installed on the Arizona District computer. Many of the data published in this report and much additional information can be retrieved from the data bases. The Ground Water Site Inventory (GWSI) data base contains station numbers, well and miscellaneous site numbers, local well numbers, locations, and other descriptive data for all Geological Survey data-collection sites. GWSI contains most of the data collected for wells, except for chemical analyses. The Automated Data Processing System (ADAPS) contains most surface-water data except for site descriptions and chemical analyses. The Water Quality Data Processing Systems (QW) contains chemical analyses of water from ground-water and surface-water sites.

Data retrievals from the three data bases are available at cost on paper or nine-track computer tape. Some of the retrievals produce data in a format suitable for machine reading that does not contain blank lines or page headers.

COOPERATION

The U.S. Geological Survey and organizations of the State of Arizona have had cooperative agreements for the systematic collection of surface-water records since 1912, for ground-water levels since 1939, and for water-quality records since 1969. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Arizona Department of Health Services, R. L. Miller, chief, Bureau of Water Quality Control.
Arizona Department of Water Resources, W. E. Steiner, director.
City of Tucson, Lewis Murphy, mayor, J. D. Valdez, manager, and James Turner, acting city engineer.
Flood Control District of Maricopa County, D. E. Sagramoso, chief engineer and general manager.
Gila Valley Irrigation District, S. L. Pace, president.
Maricopa County Municipal Water Conservation District No. 1, H. S. Raymond, president, and J. A. Falbo, general-manager.
Metropolitan Water District of Southern California, E. L. Griffith, general manager, and C. E. Hildebrand, principal engineer.
Pima County Board of Supervisors, E. S. Walker, chairman.

Salt River Valley Water Users' Association, John R. Lassen, president, and R. W. Teeples, associate general manager, Water Resources Operations.

San Carlos Irrigation and Drainage District, Howard Holland, president, and N. M. Soma, district manager.

Show Low Irrigation Company, Chester Adams, secretary-treasurer.

University of Arizona, Sol Resnick, director, Water Resources Research Center.

Assistance in the form of funds or services was given by the Bureau of Land Management, Bureau of Reclamation, and National Park Service, U.S. Department of the Interior; by the Corps of Engineers, U.S. Army; by the Forest Service, U.S. Department of Agriculture; by the International Boundary and Water Commission, U.S. Department of State; and by the Federal Power Commission. Assistance in collecting records was furnished by the Arizona Public Service Co. Organizations that supplied data are acknowledged in station descriptions.

HYDROLOGIC CONDITIONS

As is common in Arizona, streamflow varied greatly in the 1985 water year—from month to month throughout the year and from place to place in the State. The variations are related to differences in precipitation, temperature, topography, and geology. The yearly discharge at six key gaging stations ranged from 151 to 463 percent of the median of yearly discharges. The median of the yearly discharges is defined as the middle value of discharge when arranged in order of size. For the index stations, the median is computed from the yearly discharges for the 1951-80 period of record.

The yearly discharge for the 1985 water year was excessive at four index stations and within the normal range at two stations. Excessive discharge is defined as a discharge greater than the 75 percent quartile, i.e., greater than 75 percent of the values arranged in order of magnitude; deficient discharge is less than the 25 percent quartile.

The yearly discharge for the 1985 water year and the relation to the median of yearly discharges for the period 1951-80 for the six index gaging stations are given below.

Station	Discharge (acre-feet)	Percent of median
Little Colorado River near Cameron....	274,700	185
Virgin River at Littlefield	175,300	151
Gila River at head of Safford Valley, near Solomon..................	916,900	*463
San Pedro River at Charleston	51,050	*199
Salt River near Roosevelt	1,402,000	*385
Verde River below Tangle Creek, above Horseshoe Dam..........	525,700	*172

*Excessive

The discharge of the Colorado River near Grand Canyon was 19,320,000 acre-ft; the flow of the Colorado River at this point is affected by storage in upstream reservoirs, and this gaging station is no longer used as an index station.

The discharge of the Santa Cruz River at Continental was 52,570 acre-ft for the 1985 water year, which is about 762 percent of the median flow for the period of record, 1952-85. The Santa Cruz River is an intermittent stream that is subject to large variations in flow—from place to place along the river and from time to time. For example, the flow for 1965 was only about 3 percent of median but for 1984 was about 2,173 percent of median.

Storage decreased in two of the major reservoirs and increased in three during the 1985 water year. Change in contents during the year and percentage of average contents on September 30 for the period of record for several reservoirs are given below.

Reservoir	Change in contents, 1985 water year (acre-feet)	Average contents on September 30 (percent)
Lake Powell	-1,587,000	---
Lakes Mead-Mohave........	+447,000	102
San Carlos Reservoir......	+43,000	427
Salt-Verde system.........	-141,000	206
Lake Pleasant	-14,400	188

Diversions of streamflow for irrigation of Arizona lands in the 1985 water year was 3,231,000 acre-ft. About 1,655,000 acre-ft was diverted from the Colorado River for use by the Colorado River Indian Reservation, the Gila Project, and the Yuma Project. About 631,000 acre-ft of the water diverted from the Colorado River was returned to the river or was discharged across the Arizona-Sonora international boundary. About 1,576,000 acre-ft of streamflow was diverted from the Gila River basin for use in Safford Valley, the San Carlos Project, and the Salt River Project.

Figure 1 shows the discharge for the 1985 water year compared with the median runoff for the period 1951-80 at three representative gaging stations for which long-term records are available.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table "Factors for conversion of inch-pound units to International System (SI) Units" on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons, or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

> Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria, which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms that produce colonies within 24 hours when incubated at 35°C±1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.
>
> Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C±0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

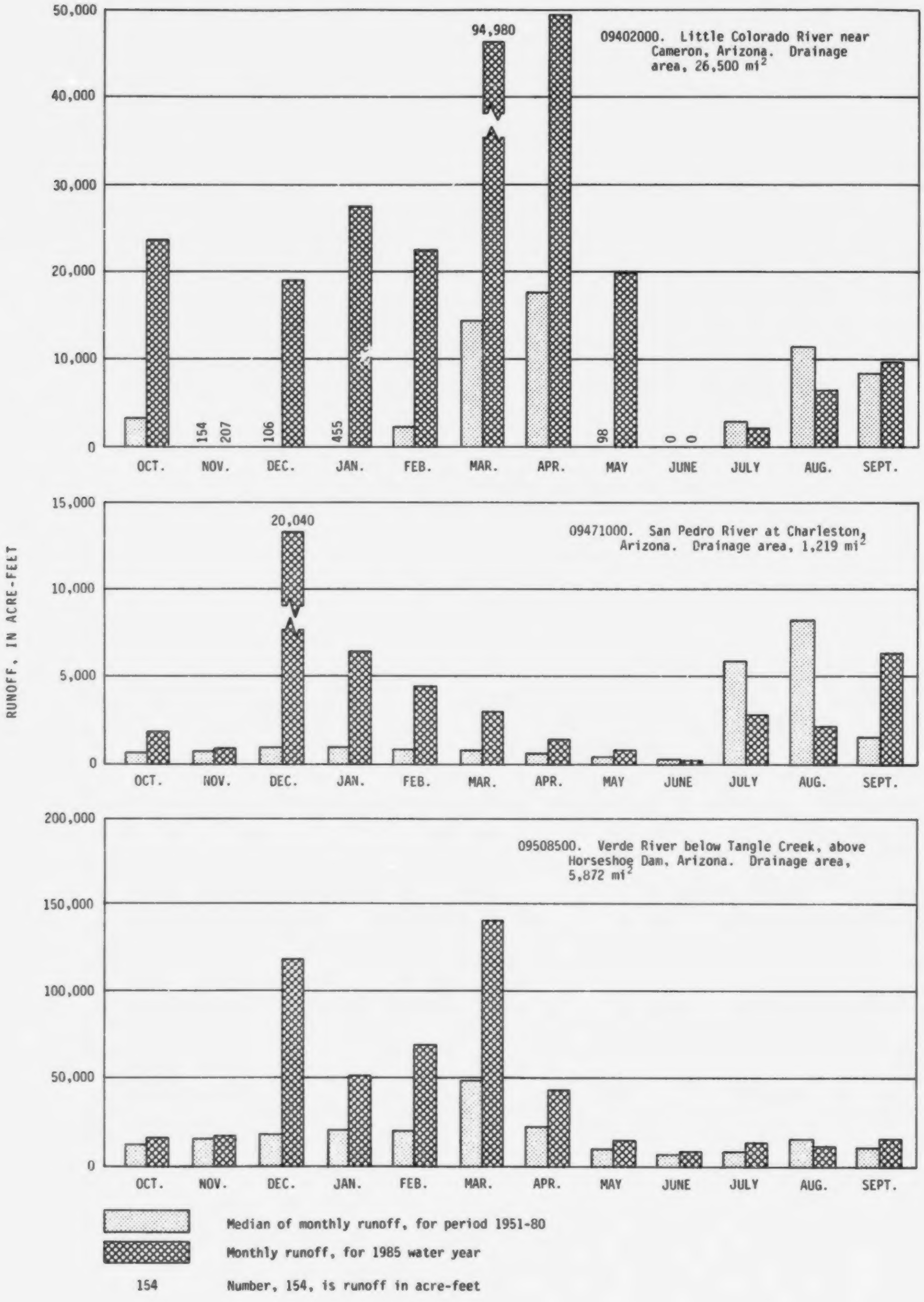


Figure 1.--Runoff during 1985 water year compared with median runoff for period 1951-80 for three representative gaging stations.

Fecal streptococcal bacteria are bacteria found also in the intestines of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth; in the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C± 1.0°C on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as numbers of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for the ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism that are counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (mean) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area are given herein include all closed basins, or noncontributing areas within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Micrograms per gram (μg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, μg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

Miscellaneous site is a location other than continuous- or partial-record stations where random discharge measurements are made or samples are collected to give better areal coverage of unusual flow events or water-quality conditions in a river basin.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

> Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.
>
> Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	.004 - .062	Sedimentation
Sand	.062 - 2.0	Sedimentation or sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants, respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth ($1\text{x}10^{12}$) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields $3.7\text{x}10^{10}$ radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

> Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.
>
> > Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.
> >
> > Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.
> >
> > Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.
>
> Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the

unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifiers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Seston is the total suspended particulate matter in water. The concentration of particulate matter has a profound effect upon the optical properties of the water, and upon the concentration of dissolved materials in the water. Their concentrations are expressed as number of colonies per 100 mL of sample.

Sodium-adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	*Hexageria*
Species	*Hexagenia limbata*

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

WRD is used as an abbreviation for "Water Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 09402500, which appears just to the left of the station name, includes the 2-digit part number "09" plus the 6-digit downstream order number "402500."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid (see fig. 2). In addition to the well number based on latitude and longitude, a local well number is given based on the Gila and Salt River meridian and base line (see fig. 3). A different numbering system is used on the Navajo and Hopi Indian Reservations. The Navajo Indian Reservation is divided into 17 administrative districts, numbered 1 to 5 and 7 to 18, and the Hopi Indian Reservation comprises district 6. The area is further divided into 15-minute quadrangles arbitrarily numbered from 1 to 151 starting in the northeast corner of the area and numbering consecutively in rows from east to west. Within the 15-minute quadrangle the well is located in miles south and west from the northeast corner of the quadrangle. The first two numbers in the well number represent the district, the next three numbers are the quadrangle, the decimal numbers are miles west by (X) miles south of the northeast corner of the quadrangle. Thus, the number 02 021-05.28X10.68 states that the well is in district 2, quadrangle 21, and is 5.28 miles west by 10.68 miles south of the northeast corner of the quadrangle.

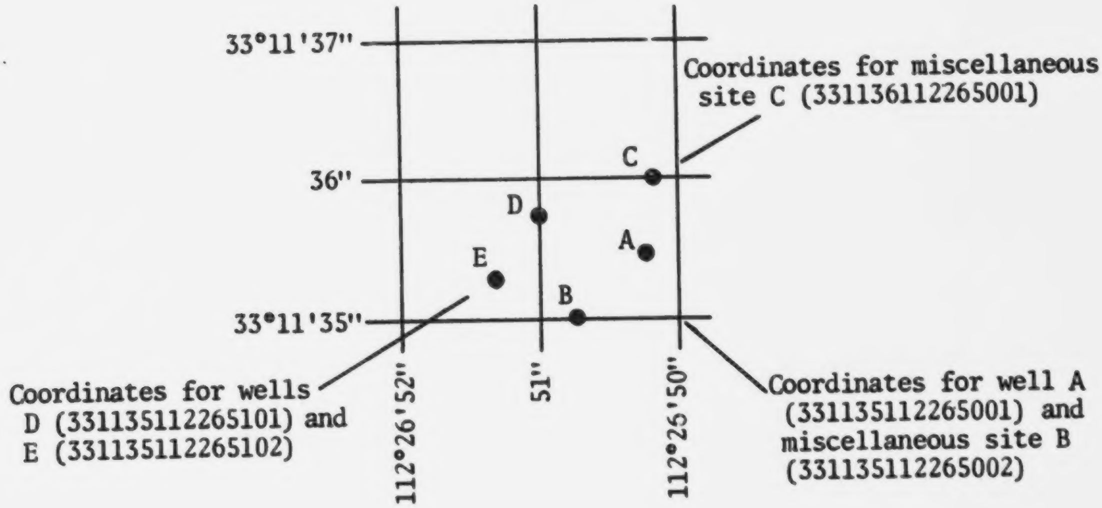
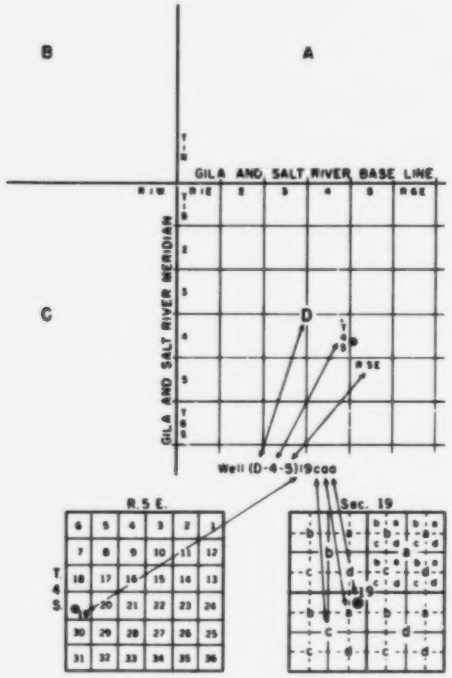

33°11'37"
Coordinates for miscellaneous site C (331136112265001)
C
36"
D
A
E
B
33°11'35"
Coordinates for wells D (331135112265101) and E (331135112265102)
112°26'52"
51"
112°26'50"
Coordinates for well A (331135112265001) and miscellaneous site B (331135112265002)

Figure 2.--System for numbering wells and miscellaneous sites (latitude and longitude).



The well numbers used by the Geological Survey in Arizona are in accordance with the Bureau of Land Management's system of land subdivision. The land survey in Arizona is based on the Gila and Salt River meridian and base line, which divide the State into four quadrants. These quadrants are designated counterclockwise by the capital letters A, B, C, and D. All land north and east of the point of origin is in A quadrant, that north and west in B quadrant, that south and west in C quadrant, and that south and east in D quadrant. The first digit of a well number indicates the township, the second the range, and the third the section in which the well is situated. The lowercase letters a, b, c, and d after the section number indicate the well location within the section. The first letter denotes a particular 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. These letters also are assigned in a counterclockwise direction, beginning in the northeast quarter. If the location is known within the 10-acre tract, three lowercase letters are shown in the well number. In the example shown, well number (D-4-5)19caa designates the well as being in the NE¼NE¼SW¼ sec. 19, T. 4 S., R. 5 E. Where more than one well is within a 10-acre tract, consecutive numbers beginning with 1 are added as suffixes.

Figure 3.--Well-numbering system in Arizona.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin. Included in this program in Arizona is station 09508300, Wet Bottom Creek near Childs.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality. The stations included in this network in Arizona are labeled in the text of this report.

Arizona fixed station network is part of the State water-pollution control program and includes a network of water-quality stations that build upon the NASQAN network. This network provides essential data for State water-quality assessment programs including the biennial report required by the Federal Clean Water Act. Included in this network of nine stations are six NASQAN stations with expanded parametric coverage. The stations are: 09380000, Colorado River at Lees Ferry (expanded NASQAN); 09427520, Colorado River below Parker Dam; 09466500, Gila River at Calva (expanded NASQAN); 09498500, Salt River near Roosevelt; 09502000, Salt River below Stewart Mountain Dam (NASQAN); 09508500, Verde River below Tangle Creek, above Horseshoe Dam; 09510000, Verde River below Bartlett Dam (expanded NASQAN); 09518000, Gila River above diversions, at Gillispie Dam (expanded NASQAN); and 09522000, Colorado River at northerly international boundary, above Morelos Dam, near Andrade, CA. (expanded NASQAN).

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity, however, there were no Arizona stations operated in this network during 1985.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States. Included in this network in Arizona are stations 09522000, Colorado River at Northerly International Boundary above Morelos Dam, near Andrade, CA.; and 09508300, Wet Bottom Creek near Childs.

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States. Included in this network in Arizona is station 09429490, Colorado River above Imperial Dam, AZ-CA.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A-6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Publication of data

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes or reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or the stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum of 1929; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum of 1929 is explained in "Definition of Terms."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a non-recording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good", within 10 percent; and "fair", within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for change in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of discharge collected by agencies other than the Geological Survey

The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, Va. 22092, maintains an index of records of discharge not published by the Geological Survey. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small daily temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection and publication of the data.

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude (see figure 2) and (2) a local number that is provided for local needs (see figure 3).

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum referenced to National Geodetic Vertical Datum of 1929 (NGVD) is given. National Geodetic Vertical Datum of 1929 is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*. by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*. by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 Pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels*. by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers*. by J. E. Reed: USGS-TWRI Book 3, Chapter B3. 1980. 106 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

3-C1. *Fluvial sediment concepts* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*. by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*. by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*. by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*. by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*. edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*. by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sedments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

5-C1. *Laboratory theory and methods for sediment analysis*. by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*. by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels*. by R. W. Schaffrannek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells*. by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-A2. *Installation and service manual for U.S. Geological Survey manometers* by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters*. by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

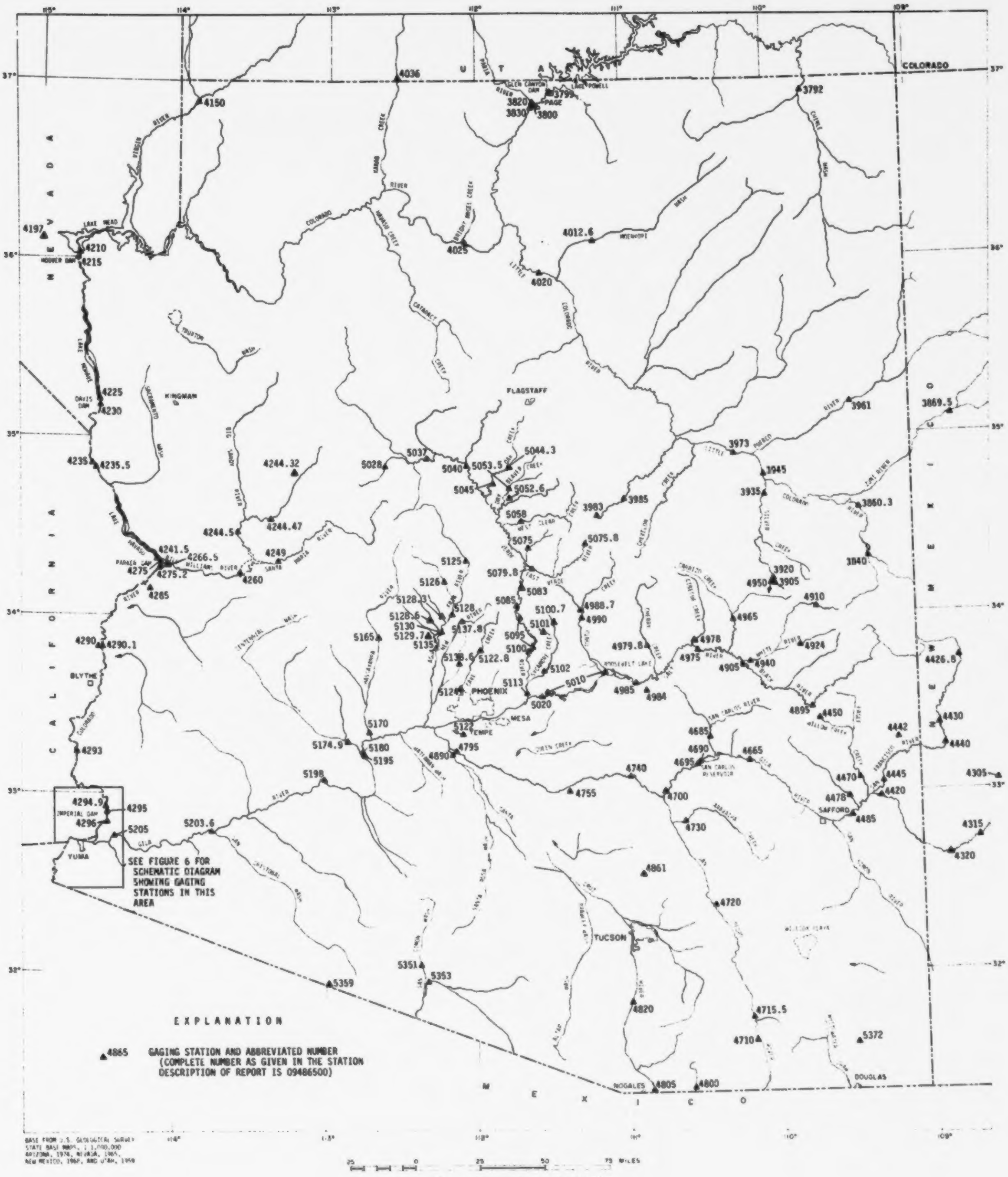

UTAH
COLORADO
NEVADA
CALIFORNIA
NEW MEXICO
MEXICO
GLEN CANYON DAM
LAKE POWELL
PAGE
LAKE MEAD
HOOVER DAM
DAVIS DAM
KINGMAN
FLAGSTAFF
PARKER DAM
BLYTHE
PHOENIX
TEMPE
MESA
ROOSEVELT LAKE
SAN CARLOS RESERVOIR
SAFFORD
TUCSON
NOGALES
DOUGLAS
YUMA
IMPERIAL DAM
COLORADO RIVER
VIRGIN RIVER
LITTLE COLORADO RIVER
PUERCO RIVER
ZUNI RIVER
GILA RIVER
SALT RIVER
VERDE RIVER
BILL WILLIAMS RIVER
SANTA MARIA RIVER
SAN PEDRO RIVER
SANTA CRUZ RIVER
SAN FRANCISCO RIVER
SAN CARLOS RIVER
WHITE RIVER
BLACK RIVER
HASSAYAMPA RIVER
AGUA FRIA RIVER
4036
4150
3820
3830
3799
3800
3792
4197
4210
4215
4025
4012.6
4020
4225
4230
3961
3869.5
4235
4235.5
4244.32
5028
5037
5040
5053.5
5044.3
5045
5052.6
5058
3973
3945
3935
3860.3
3983
3985
4244.54
4244.47
4241.5
4266.5
4249
4275
4275.2
4260
4285
5075
5075.8
5125
5079.8
5126
5083
5128.3
5128.6
5130
5129.7
5135
5128
5137.8
5085
5100.7
4988.7
4990
5101
3920
3905
4950
3840
4910
4965
5165
5095
5100
5138.6
5122.8
4979.8
4978
4975
4924
4905
4940
4290
4290.1
5102
5113
5124
5010
5020
4985
4984
4426.8
4895
4450
5170
5174.9
5180
5195
5127
4890
4795
4685
4690
4695
4665
4442
4430
4440
4740
5198
4755
4700
4470
4445
4420
4478
4485
4305
4294.9
4295
4296
5205
5203.6
4730
4315
4320
4293
4861
4720
5351
5353
5359
4820
4715.5
4710
5372
4805
4800
37°
36°
35°
34°
33°
32°
115°
114°
113°
112°
111°
110°
109°
SEE FIGURE 6 FOR SCHEMATIC DIAGRAM SHOWING GAGING STATIONS IN THIS AREA
EXPLANATION
4865 GAGING STATION AND ABBREVIATED NUMBER (COMPLETE NUMBER AS GIVEN IN THE STATION DESCRIPTION OF REPORT IS 09486500)
BASE FROM U.S. GEOLOGICAL SURVEY STATE BASE MAPS, 1:1,000,000 ARIZONA, 1974, NEVADA, 1965, NEW MEXICO, 1968, AND UTAH, 1959
25 0 25 50 75 MILES
25 0 25 50 75 KILOMETERS

Figure 4.--Map of Arizona showing location of gaging stations.

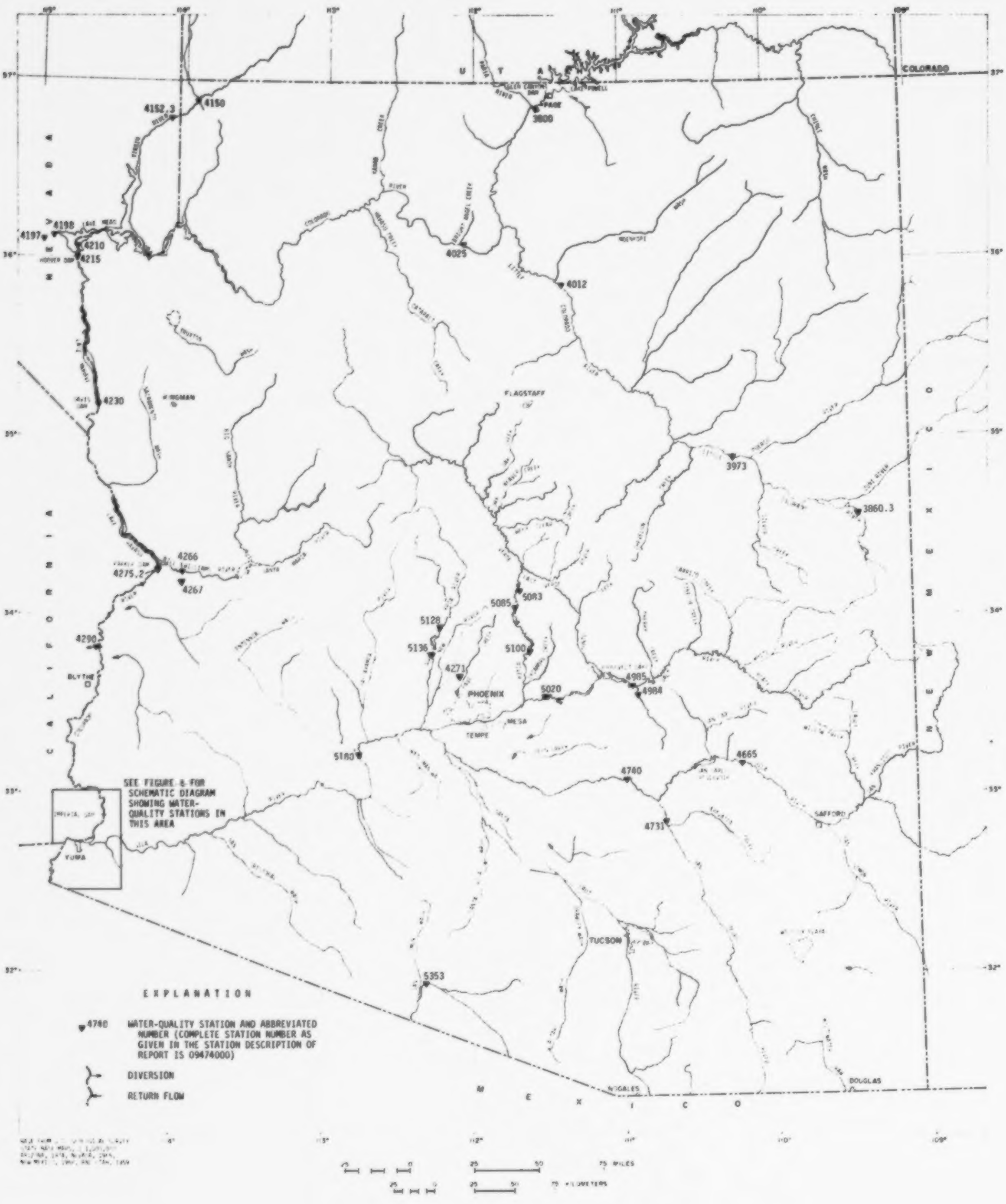

U T A H
COLORADO
N E V A D A
C A L I F O R N I A
N E W M E X I C O
M E X I C O
4152.3
4150
3800
PAGE
LAKE POWELL
4197
4198
4210
4215
LAKE MEAD
HOOVER DAM
4025
4012
4230
KINGMAN
FLAGSTAFF
3973
3860.3
4266
4275.2
4267
4290
BLYTHE
5085
5083
5128
5136
5100
4271
PHOENIX
5020
4985
4984
TEMPE
MESA
5180
4740
4665
4731
SAFFORD
TUCSON
5353
NOGALES
DOUGLAS
YUMA
COLORADO
SEE FIGURE 6 FOR SCHEMATIC DIAGRAM SHOWING WATER-QUALITY STATIONS IN THIS AREA
EXPLANATION
4740 WATER-QUALITY STATION AND ABBREVIATED NUMBER (COMPLETE STATION NUMBER AS GIVEN IN THE STATION DESCRIPTION OF REPORT IS 09474000)
DIVERSION
RETURN FLOW
37°
36°
35°
34°
33°
32°
114°
113°
112°
111°
110°
109°
75 MILES
75 KILOMETERS

Figure 5.--Map of Arizona showing location of water-quality stations.

SAN JUAN RIVER BASIN

09379200 CHINLE CREEK NEAR MEXICAN WATER, AZ

LOCATION.--Lat 36°56'38", long 109°42'36", in sec.19, T.41 N., R.25 E. (unsurveyed), Apache County, Hydrologic Unit 1400204, in Navajo Indian Reservation, on right bank 150 ft upstream from bridge on U.S. Highway 160, 3 mi upstream from Walker Creek, 4 mi southwest of Mexican Water, 5 mi downstream from confluence of Chinle Wash and Laguna Creek, and 6 mi upstream from Arizona-Utah State line.

DRAINAGE AREA.--3,660 mi^2, approximately, of which 360 mi^2 is noncontributing.

PERIOD OF RECORD.--October 1964 to current year (monthly discharge only for 1979). Prior to October 1970 published as Chinle Wash near Mexican Water.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,720 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-30, Nov. 20 to Dec. 7, Dec. 16 to Feb. 13, Mar. 10-11, 15-26, May 28 to June 20, July 18-20, 24-27, Sept. 5-24. Records fair except for periods of estimated record, which are poor. Some diversions upstream for irrigation, stock tanks and domestic use. Many Farms Reservoir, above 25 mi upstream, was built in 1939 with an original capacity of 25,000 acre-ft and provides off-channel storage for irrigation of about 1,600 acres.

AVERAGE DISCHARGE.--21 years, 32.5 ft^3/s, 23,550 acre-ft/yr; median of yearly mean discharges, 24 ft^3/s, 17,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft^3/s Aug. 24, 1982, gage height, 13.87 ft, from rating curve extended above 3,100 ft^3/s on basis of slope-area measurement at gage height 12.50 ft; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge (*), from rating curve extended as explained above, and peak discharges above base of 500 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 5	unknown	4,430	8.90	Apr. 30	0800	*4,910	9.05
Oct. 13	unknown	824	5.08	Aug. 4	0700	1,690	6.31
Mar. 14	0700	1,470	6.04	Sept. 12	unknown	527	4.50

No flow June 10 to July 20, Aug. 19 to 23, Aug. 27 to Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	17	10	15	3.0	130	36	536	8.0	.00	14	.00
2	5.0	15	10	10	2.0	160	32	345	6.0	.00	4.8	.00
3	10	14	10	7.0	2.0	135	36	349	5.0	.00	43	.00
4	50	14	10	5.0	1.0	100	147	260	4.0	.00	233	.00
5	900	14	10	5.0	2.0	68	155	222	3.0	.00	36	.00
6	400	13	9.0	5.0	3.0	39	193	188	2.0	.00	12	.00
7	170	13	9.5	5.0	3.0	26	219	164	1.0	.00	6.2	.00
8	50	13	3.1	10	3.0	26	324	127	.40	.00	2.5	.00
9	20	12	3.1	15	3.0	34	417	106	.10	.00	32	.00
10	10	12	12	15	10	30	437	104	.00	.00	54	.00
11	5.0	14	22	10	100	50	546	106	.00	.00	16	5.0
12	5.0	15	6.9	10	85	648	532	87	.00	.00	7.8	150
13	250	16	7.2	10	51	954	546	91	.00	.00	3.4	70
14	100	22	14	7.0	65	1100	470	89	.00	.00	.87	25
15	50	39	15	7.0	58	500	421	74	.00	.00	.46	10
16	40	33	15	5.0	60	150	363	56	.00	.00	.38	2.0
17	30	33	15	5.0	60	70	304	28	.00	.00	.30	1.0
18	20	25	12	5.0	52	30	294	30	.00	.00	.10	5.0
19	20	28	12	5.0	80	10	335	28	.00	.00	.00	85
20	60	25	20	5.0	206	10	275	32	.00	.00	.00	60
21	100	25	20	5.0	239	10	217	41	.00	51	.00	20
22	130	20	15	5.0	217	7.0	276	45	.00	159	.00	8.0
23	115	20	10	20	146	7.0	502	26	.00	39	.00	4.0
24	95	20	10	150	95	7.0	317	20	.00	20	.30	3.0
25	60	15	10	60	74	5.0	309	15	.00	11	.40	2.2
26	50	15	10	80	51	4.0	382	41	.00	9.0	.10	2.2
27	30	15	30	100	55	2.2	390	35	.00	5.0	.00	1.5
28	25	15	100	50	89	2.2	278	20	.00	1.1	.00	1.1
29	20	10	150	20	---	5.3	1030	15	.00	1.0	.00	1.1
30	14	10	80	10	---	6.2	2280	12	.00	21	.00	.90
31	17	---	30	5.0	---	76	---	10	---	19	.00	---
TOTAL	2856.0	552	690.8	666.0	1815.0	4401.9	12065	3302	29.50	336.10	467.61	457.00
MEAN	92.1	18.4	22.3	21.5	64.8	142	402	107	.98	10.8	15.1	15.2
MAX	900	39	150	150	239	1100	2280	536	8.0	159	233	150
MIN	5.0	10	3.1	5.0	1.0	2.2	32	10	.00	.00	.00	.00
AC-FT	5660	1090	1370	1320	3600	8730	23930	6550	59	667	928	906

CAL YR 1984 TOTAL 24420.10 MEAN 66.7 MAX 1640 MIN .00 AC-FT 48440

09379900 LAKE POWELL AT GLEN CANYON DAM, AZ

LOCATION.--Lat 36°56'12", long 111°29'00", in sec.24, T.41 N., R.8 E., Coconino County, Hydrologic Unit 14070006, at Glen Canyon Dam on Colorado River, 900 ft upstream from bridge on U.S. Highway 89, 1.4 mi downstream from Wahweap Creek, 2 mi northwest of Page, and 12 mi downstream from Utah-Arizona State line.

DRAINAGE AREA.--111,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 1, 1964, nonrecording gage at same site and datum.

REMARKS.--No estimated daily contents. Reservoir is formed by concrete-arch gravity dam; storage began Mar. 13, 1963; dam completed September 1963. Total capacity, 27,000,000 acre-ft consisting of the following: dead storage, 1,998,000 acre-ft below elevation 3,370 ft-sill of outlet gates; usable contents, 25,002,000 acre-ft between elevations 3,370 ft and 3,700 ft-top of conservation pool. Reservoir is used for power development, to provide storage replacement for upstream irrigation development, and to meet downstream requirements under the Colorado River Compact of 1922. Figures given herein represent usable contents; prior to Oct. 1, 1968, figures of total contents were published (prior to sealing of diversion tunnel July 7, 1965, all storage was usable).

COOPERATION.--Records furnished by U.S. Bureau of Reclamation.

EXTREMES (at 2400) FOR PERIOD OF RECORD.--Maximum contents, 26,373,000 acre-ft July 14, 1983, elevation, 3,708.34 ft; minimum since power pool level was reached (Aug. 16, 1964), 4,166,000 acre-ft Mar. 18, 1965, elevation, 3,490.76 ft.

EXTREMES (at 2400) FOR CURRENT YEAR.--Maximum contents, 25,020,000 acre-ft July 1, elevation, 3,700.12 ft; minimum, 21,160,000 acre-ft Mar. 12, elevation, 3,674.82 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

3,670	20,474,000	3,690	23,424,000
3,675	21,187,000	3,695	24,204,000
3,680	21,916,000	3,700	25,002,000
3,685	22,662,000	3,705	25,818,000

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24328	23920	23280	22605	21958	21326	21413	22667	24326	25020	24520	23491
2	24311	23884	23263	22585	21927	21304	21420	22718	24356	25014	24496	23446
3	24285	23869	23245	22561	21888	21274	21428	22779	24369	25007	24477	23409
4	24266	23855	23225	22540	21858	21258	21425	22829	24404	24986	24460	23363
5	24261	23833	23205	22515	21834	21234	21425	22900	24418	24977	24429	23322
6	24247	23808	23187	22486	21810	21210	21435	22991	24448	24943	24409	23282
7	24228	23789	23170	22468	21784	21193	21445	23090	24491	24941	24379	23257
8	24214	23770	23138	22438	21758	21180	21455	23191	24534	24922	24350	23220
9	24200	23750	23118	22423	21744	21174	21471	23299	24589	24899	24330	23185
10	24181	23727	23093	22404	21722	21167	21500	23391	24657	24886	24285	23150
11	24157	23705	23072	22387	21700	21164	21534	23505	24740	24859	24254	23142
12	24140	23688	23043	22363	21681	21160	21575	23607	24816	24832	24217	23099
13	24116	23658	23035	22344	21661	21167	21611	23711	24880	24827	24183	23072
14	24099	23643	23011	22322	21640	21169	21655	23803	24919	24805	24149	23063
15	24074	23624	22990	22296	21623	21170	21702	23887	24948	24774	24105	23026
16	24061	23604	22965	22272	21602	21182	21761	23956	24972	24740	24063	23000
17	24030	23582	22945	22256	21583	21197	21828	23989	24996	24728	24041	22977
18	24030	23565	22924	22228	21563	21208	21900	24008	25002	24704	23999	22961
19	24049	23542	22901	22202	21538	21236	21958	24025	25009	24680	23958	22962
20	24068	23524	22880	22179	21519	21244	22033	24030	25017	24659	23933	22944
21	24090	23505	22854	22162	21509	21267	22092	24050	25015	24649	23897	22932
22	24099	23482	22833	22149	21487	21271	22165	24065	25009	24657	23864	22918
23	24077	23454	22809	22130	21462	21288	22231	24083	25012	24649	23834	22903
24	24063	23425	22786	22113	21438	21303	22298	24099	25007	24641	23803	22883
25	24038	23409	22760	22098	21416	21307	22348	24118	24991	24648	23760	22863
26	24014	23391	22736	22081	21397	21304	22405	24131	25007	24630	23722	22848
27	24003	23365	22717	22060	21375	21345	22447	24154	25004	24614	23697	22822
28	23981	23338	22691	22044	21348	21361	22464	24184	25012	24597	23657	22810
29	23967	23322	22667	22024	---	21372	22542	24213	25017	24582	23621	22788
30	23947	23300	22649	22007	---	21383	22599	24249	25019	24553	23575	22760
31	23934	---	22625	21989	---	21399	---	24295	---	24539	23538	---
MAX	24328	23920	23280	22605	21958	21399	22599	24295	25019	25020	24520	23491
MIN	23934	23300	22625	21989	21348	21160	21413	22667	24326	24539	23538	22760
(*)	3693.29	3689.20	3684.76	3680.50	3676.12	3676.47	3684.59	3695.58	3700.11	3697.12	3690.74	3685.66
(**)	-413000	-634000	-675000	-636000	-641000	+51000	+1200000	+1696000	+724000	-480000	-1001000	-778000

CAL YR 1984 MAX 25400 MIN 20898 ** -72000
WTR YR 1985 MAX 25020 MIN 21160 ** -1587000

* Elevation, in feet, at end of month.
** Change in contents, in acre-feet.

09380000 COLORADO RIVER AT LEES FERRY, AZ
(National stream-quality accounting network)

LOCATION.--Lat 36°51'53", long 111°35'15", in NE¼SE¼ sec.13, T.40 N., R.7 E., Coconino County, Hydrologic Unit 14070006, in Navajo Indian Reservation, on left bank at head of Marble Gorge at Lees Ferry, just upstream from Paria River, 16 mi downstream from Glen Canyon Dam, 28 mi downstream from Utah-Arizona State line, and 61.5 mi upstream from Little Colorado River.

DRAINAGE AREA.--111,800 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1895 to current year. Estimates of monthly and annual discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1921-23. WSP 1313: 1914-21.

GAGE.--Water-stage recorder. Datum of gage is 3,106.16 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 19, 1923, nonrecording gages or reference points within 400 ft of present gage, at different datums.

REMARKS.--No estimated daily discharges. Records excellent. Flow regulated since Mar. 13, 1963, by Lake Powell, 16 mi upstream. Many diversions above Lake Powell for irrigation, municipal, and industrial use. No diversions or inflow between Lake Powell and the gage.

AVERAGE DISCHARGE.--51 years (water years 1912-62), 17,850 ft^3/s, 12,923,000 acre-ft/yr; 21 years (water years 1965-85), 14,190 ft^3/s, 10,281,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1895-1962: Maximum discharge, 220,000 ft^3/s June 18, 1921, gage height, 26.5 ft, from floodmarks, from rating curve extended above 120,000 ft^3/s on basis of discharge computed for station near Grand Canyon; minimum, 750 ft^3/s Dec. 27, 1924.

1963-85: Maximum discharge, 97,300 ft^3/s June 29, 1983, gage height, 18.14 ft; minimum daily, 700 ft^3/s Jan. 23, 24, 1963, result of closing coffer dam at Glen Canyon Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1868, about 300,000 ft^3/s July 7, 1884, gage height, 31.5 ft, present site and datum, from floodmark at mouth of Paria River, from rating curve extended above 120,000 ft^3/s on basis of discharge computed for flood of June 18, 1921, for station near Grand Canyon.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 47,900 ft^3/s June 2, gage height, 14.09 ft; minimum daily, 5,200 ft^3/s Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23800	25000	24000	24900	26600	26800	16400	20000	46900	29900	28300	28600
2	23600	25200	24500	25100	29100	25900	18500	19800	47400	30400	28600	27500
3	23500	25200	22200	25200	29300	26900	18300	19300	47100	30100	26900	25300
4	24000	25100	22800	25100	27900	26800	20800	26400	46900	30000	26800	28100
5	23800	25000	23000	25100	25600	26700	20400	26700	43100	30200	28200	27900
6	23900	25000	22300	25100	26200	26800	21000	26100	37700	30100	28300	24600
7	23800	24900	22200	25200	26200	25900	19700	26200	33200	29800	26900	23900
8	23500	24800	24700	25200	26400	23500	21700	26500	30300	29800	26600	23200
9	20300	24400	25000	25200	26300	20900	22200	26300	30100	29700	26500	25100
10	23500	24700	24100	25100	26300	19100	19800	26700	30200	29400	26100	24600
11	23800	24800	25000	25200	26200	19600	20400	26700	30200	29700	26900	22700
12	23500	24900	25000	25200	26300	19500	20900	26300	31900	29900	26700	23100
13	23700	24800	25000	25300	26400	19700	18700	26400	37200	24300	28000	23800
14	23500	25000	24900	25300	26300	20700	21200	26600	42300	24400	27500	23600
15	23800	25000	25000	25300	26400	20900	20900	25900	47000	30200	26800	22000
16	23400	24900	25100	25300	26500	19600	22300	24200	45800	29900	27200	24300
17	23400	25000	23600	23900	26700	16400	15300	36100	45000	28200	26100	24700
18	20600	24900	24300	24700	26700	18500	14600	45500	46800	29000	25300	21800
19	6390	24800	23900	25200	26700	16200	23300	45300	46500	28100	27500	22900
20	5200	24900	23800	25200	26800	18400	23400	44100	46700	27400	25100	22700
21	5220	24900	24900	24700	26800	15800	23400	44300	46800	27900	24100	21400
22	13100	24600	25000	25100	26600	16400	22900	45200	46600	26500	25200	22300
23	25000	24700	25100	24600	26800	16600	21100	43900	45600	26500	24500	21600
24	24500	24500	25100	25300	26700	15500	19700	45200	46600	25400	25200	21500
25	24700	24300	25100	25200	26800	19300	22400	43900	43500	26100	24500	22000
26	25200	24500	24300	25400	26600	19000	21500	44500	36600	27600	26300	21300
27	25000	24500	25100	25400	26800	17900	22100	44300	35800	28500	25000	20600
28	25100	24500	24900	25400	26800	16100	23400	46100	32800	29500	25200	21200
29	25000	24200	25100	25400	---	17400	19600	46200	29900	27900	25800	18900
30	25100	24000	25100	25400	---	18400	21500	46800	29900	27900	28800	20900
31	24700	---	25100	25400	---	16400	---	45300	---	28700	28700	---
TOTAL	673610	743000	755200	779100	748800	627600	617400	1066800	1206400	883000	823600	702100
MEAN	21730	24770	24360	25130	26740	20250	20580	34410	40210	28480	26570	23400
MAX	25200	25200	25100	25400	29300	26900	23400	46800	47400	30400	28800	28600
MIN	5200	24000	22200	23900	25600	15500	14600	19300	29900	24300	24100	18900
AC-FT	1336000	1474000	1498000	1545000	1485000	1245000	1225000	2116000	2393000	1751000	1634000	1393000

CAL YR 1984 TOTAL 10271910 MEAN 28070 MAX 45300 MIN 5200 AC-FT 20370000
WTR YR 1985 TOTAL 9626610 MEAN 26370 MAX 47400 MIN 5200 AC-FT 19090000

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January to July 1926, October 1926 to June 1927, October 1928 to December 1933, November 1942 to October 1945, October 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1981, February 1982 to current year.
WATER TEMPERATURE: July 1949 to September 1981, February 1982 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1928 to December 1933, November 1942 to September 1944, October 1947 to September 1965.

INSTRUMENTATION.--Specific conductance and water temperature recorder March 1977 to September 1981, February 1982 to current year.

REMARKS.--Unpublished daily specific conductance measurements for period November 1942 to October 1945, October 1947 to September 1964 available from district office in Tucson, Ariz.

Because of the permanent change in stream characteristics owing to the regulation of flow by Glen Canyon Dam since Mar. 13, 1963, and the subsequent initial filling of Lake Powell, exteme values for the period of daily record now include only those obtained after July 31, 1965, at which time a normal flow release pattern was begun.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (August 1965 to September 1981, February 1982 to current year): Maximum, 1,260 microsiemens Apr. 20, 21, 1967; minimum, 460 microsiemens Aug. 10, 1965.
WATER TEMPERATURES (August 1965 to September 1981, February 1982 to current year): Maximum 21.0°C on several days during August, September, and October, 1965, 1967, 1968; minimum, 2.0°C on Jan. 29, 30, 1970.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 789 microsiemens Mar. 24; minimum recorded, 581 microsiemens Dec. 15, 20.
WATER TEMPERATURE: Maximum recorded, 13.5°C Nov. 23, 24; minimum recorded, 6.5°C Mar. 28.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
NOV 1984											
07...	1445	24900	700	8.10	19.0	12.5	1.6	683	7.3	77	--
JAN 1985											
04...	1330	25000	590	8.20	6.5	10.5	2.2	698	8.8	86	18
MAR											
06...	1930	27000	725	8.30	14.0	8.5	1.6	681	9.4	--	19
MAY											
09...	1100	25200	725	8.30	21.5	8.0	1.0	684	9.4	88	<10
JUL											
03...	0945	30000	670	8.30	30.0	9.5	1.0	689	8.1	--	<10
SEP											
03...	1630	25900	642	8.20	28.0	10.5	9.5	679	8.4	85	<10

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
NOV 1984											
07...	K1	<1	220	98	55	20	51	2	2.9	149	123
JAN 1985											
04...	K2	K2	200	86	50	19	47	1	2.9	143	117
MAR											
06...	K1	K4	260	130	64	24	60	2	3.2	157	129
MAY											
09...	<1	K1	250	120	62	23	60	2	3.1	161	132
JUL											
03...	K3	K4	250	130	64	21	51	1	2.9	140	115
SEP											
03...	<1	K1	230	120	56	21	51	2	2.9	135	111

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

WATER QUALITY DATA

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 1984 07...	180	28	0.3	8.4	423	420	0.58	--	--	0.32	--
JAN 1985 04...	150	26	0.2	8.5	383	370	0.52	3	0.30	0.31	0.02
MAR 06...	200	40	1.9	9.0	468	480	0.64	3	0.40	0.35	0.04
MAY 09...	180	38	0.2	9.0	484	450	0.66	1	0.40	0.40	0.04
JUL 03...	170	31	0.3	8.1	428	420	0.58	6	0.40	--	0.05
SEP 03...	160	31	0.2	8.8	427	400	0.58	1	0.40	0.45	0.05

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV 1984 07...	0.02	--	0.2	--	--	0.01	0.02	0.01	0.03	10	--
JAN 1985 04...	0.03	0.38	0.4	0.7	3.1	0.01	0.01	<0.01	--	--	1
MAR 06...	0.02	0.26	0.3	0.7	3.1	0.02	<0.01	<0.01	--	10	<1
MAY 09...	0.02	0.26	0.3	0.7	3.1	0.01	0.01	<0.01	--	--	<1
JUL 03...	--	--	--	--	--	--	--	--	--	30	1
SEP 03...	0.04	0.35	0.4	0.8	3.5	<0.01	<0.01	<0.01	--	20	1

DATE	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)
NOV 1984 07...	<1	92	<10	--	--	3	--	2	<3	--	4
JAN 1985 04...	1	84	--	60	3	2	3	2	--	4	5
MAR 06...	1	90	<0.5	80	28	9	9	<1	<3	52	4
MAY 09...	<1	92	--	90	7	<1	7	1	--	16	4
JUL 03...	1	90	<0.5	60	<1	1	4	<1	<3	22	7
SEP 03...	1	92	<0.5	70	17	10	5	<1	<3	20	8

< Actual value is known to be less than value shown.

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

WATER QUALITY DATA

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
NOV 1984											
07...	--	<3	--	4	25	--	3	--	<0.1	<10	2
JAN 1985											
04...	<10	5	<1	<1	--	10	--	0.1	--	--	--
MAR											
06...	--	5	12	<1	25	<10	<1	--	<0.1	<10	3
MAY											
09...	70	4	7	5	--	<10	4	--	--	--	--
JUL											
03...	--	4	2	9	26	<10	3	--	0.1	<10	5
SEP											
03...	--	<3	10	6	22	<10	5	<0.1	--	<10	1

DATE	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 1984										
07...	--	2	<1	640	<6	--	15	34	12	807
JAN 1985										
04...	2	2	<1	--	--	10	13	23	36	2430
MAR										
06...	3	2	<1	680	<6	20	19	37	12	875
MAY										
09...	3	3	<1	--	--	10	10	24	7	476
JUL										
03...	2	2	<1	640	<6	130	51	31	12	972
SEP										
03...	3	3	<1	630	<6	20	22	32	3	210

< Actual value is known to be less than value shown.

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	721	701	714	---	---	---	633	623	631	622	602	610
2	717	697	708	---	---	---	632	622	628	613	593	600
3	714	704	708	---	---	---	630	620	621	613	593	603
4	712	690	704	---	---	---	610	600	606	603	593	602
5	712	702	711	---	---	---	610	600	602	603	593	600
6	722	712	713	---	---	---	600	600	600	603	593	601
7	722	712	712	697	687	691	610	600	601	613	593	602
8	713	703	711	705	685	690	610	590	600	603	593	598
9	713	703	708	704	694	702	601	591	596	613	593	606
10	713	703	704	692	692	692	601	591	597	613	603	611
11	713	703	706	691	681	689	601	591	600	623	603	613
12	713	703	709	689	679	684	611	601	602	623	593	605
13	713	703	710	688	678	679	611	601	604	604	594	599
14	703	693	699	686	676	679	611	591	599	604	594	599
15	703	693	702	686	676	678	601	581	591	604	594	597
16	714	694	704	684	664	674	611	591	596	614	594	604
17	714	704	708	673	663	668	631	601	612	614	604	610
18	714	694	705	671	661	664	611	591	601	624	614	616
19	704	704	704	670	660	665	601	591	596	614	604	613
20	---	---	---	668	658	662	601	581	591	624	604	614
21	---	---	---	666	646	656	612	602	606	634	614	623
22	---	---	---	655	645	650	612	602	605	644	624	637
23	---	---	---	654	644	647	612	602	604	634	624	632
24	---	---	---	653	643	647	612	602	602	644	624	634
25	---	---	---	671	641	654	602	592	597	645	625	635
26	---	---	---	680	660	665	602	582	592	645	625	636
27	---	---	---	668	638	655	592	582	590	645	635	639
28	---	---	---	647	637	641	592	592	592	665	645	658
29	---	---	---	635	625	635	602	592	600	675	645	662
30	---	---	---	645	625	635	612	602	605	695	665	678
31	---	---	---	---	---	---	622	602	612	705	685	693
MONTH	---	---	---	---	---	---	633	581	603	705	593	620

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	685	655	670	707	687	702	770	740	756	757	737	746
2	655	645	648	727	687	698	760	740	749	748	738	743
3	645	635	636	768	728	743	760	750	755	748	738	742
4	665	635	655	768	708	744	761	751	756	748	738	744
5	675	655	667	718	698	711	771	751	761	748	738	742
6	676	646	657	748	708	726	761	751	759	749	729	738
7	666	646	656	768	728	752	761	751	757	749	739	744
8	666	646	656	748	718	731	762	742	752	749	---	731
9	656	646	653	738	718	726	752	742	749	749	739	742
10	686	656	671	728	718	726	752	742	750	760	740	750
11	676	646	662	728	718	722	762	752	755	750	710	735
12	676	656	666	738	718	728	763	743	754	750	730	743
13	676	656	667	758	708	738	763	743	755	750	730	737
14	666	656	663	728	698	713	763	753	757	731	711	721
15	666	656	661	739	719	726	763	743	753	721	691	703
16	666	656	665	739	719	732	754	744	751	701	691	694
17	676	666	670	729	719	724	764	744	---	---	---	---
18	687	667	677	729	709	719	754	734	750	---	---	---
19	677	667	676	749	729	736	754	734	746	---	---	---
20	677	677	677	749	729	743	765	745	752	---	---	---
21	687	677	682	759	739	745	765	725	751	---	---	---
22	697	677	692	769	729	752	765	745	755	---	---	---
23	707	677	693	759	719	739	745	725	741	---	---	---
24	687	667	681	789	749	761	766	746	753	---	---	---
25	697	687	691	759	739	749	766	746	754	---	---	---
26	697	687	690	779	749	766	766	726	749	---	---	---
27	697	687	690	779	759	770	756	736	749	---	---	---
28	707	687	696	780	770	779	767	737	752	734	614	717
29	---	---	---	780	760	773	747	727	735	734	714	722
30	---	---	---	780	740	754	757	737	747	725	685	706
31	---	---	---	770	750	760	---	---	---	735	695	712
MONTH	707	635	670	789	687	738	771	725	752	---	---	---

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	725	705	717	---	---	---	616	594	606	652	641	648
2	715	705	710	671	669	670	635	595	611	650	644	647
3	715	705	712	674	670	672	652	636	643	651	641	646
4	715	705	708	675	672	674	667	631	646	---	---	---
5	715	695	706	674	670	672	670	656	667	---	---	---
6	---	---	---	678	672	674	667	650	658	---	---	---
7	---	---	---	678	669	673	658	650	654	---	---	---
8	---	---	---	681	664	671	659	649	654	---	---	---
9	---	---	---	677	663	668	655	646	651	---	---	---
10	---	---	---	671	662	667	655	641	646	---	---	---
11	---	---	---	671	654	662	648	637	643	---	---	---
12	---	---	---	674	658	665	651	630	642	---	---	---
13	---	---	---	674	660	668	641	631	637	---	---	---
14	---	---	---	668	658	664	641	622	633	---	---	---
15	---	---	---	673	658	665	642	621	630	---	---	---
16	---	---	---	663	658	661	649	632	644	---	---	---
17	---	---	---	659	646	653	654	636	647	---	---	---
18	---	---	---	659	636	648	653	638	649	---	---	---
19	---	---	---	657	637	647	657	639	651	---	---	---
20	---	---	---	647	637	642	659	648	655	---	---	---
21	---	---	---	645	629	638	655	647	651	---	---	---
22	---	---	---	647	631	639	670	629	656	---	---	---
23	---	---	---	650	641	646	656	632	650	---	---	---
24	---	---	---	648	640	644	661	653	657	---	---	---
25	---	---	---	645	636	641	654	647	650	---	---	---
26	---	---	---	638	630	635	652	642	646	---	---	---
27	---	---	---	636	632	634	653	645	650	---	---	---
28	---	---	---	630	621	627	652	647	650	---	---	---
29	---	---	---	625	616	621	650	645	647	---	---	---
30	---	---	---	623	607	613	653	644	649	---	---	---
31	---	---	---	621	609	614	647	637	645	---	---	---
MONTH	---	---	---	---	---	---	670	594	646	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.5	12.0	12.0	12.0	11.5	12.0	12.5	12.5	12.5	11.0	10.5	10.5
2	12.0	11.5	12.0	12.0	11.5	12.0	13.0	12.5	12.5	10.5	10.5	10.5
3	12.0	11.0	12.0	12.5	12.0	12.0	13.0	12.5	12.5	10.5	10.5	10.5
4	12.5	11.5	12.0	12.0	11.5	12.0	13.0	12.5	12.5	10.5	10.5	10.5
5	12.0	11.0	11.5	12.0	11.5	12.0	13.0	12.5	12.5	10.5	10.5	10.5
6	11.5	11.0	11.5	12.5	12.0	12.0	13.0	12.5	12.5	10.5	10.5	10.5
7	12.0	11.0	11.5	12.5	12.0	12.5	12.5	12.5	12.5	10.5	10.5	10.5
8	12.5	11.5	12.0	12.0	10.5	12.0	13.0	12.5	12.5	10.5	10.5	10.5
9	12.5	11.5	12.0	11.5	10.5	11.0	13.0	12.5	12.5	10.5	10.0	10.0
10	12.0	11.5	12.0	12.0	11.5	11.5	12.5	12.5	12.5	10.5	10.0	10.0
11	12.0	11.5	12.0	12.5	12.0	12.0	12.5	12.5	12.5	10.0	10.0	10.0
12	12.0	11.5	11.5	12.5	12.0	12.5	12.5	12.0	12.5	10.0	10.0	10.0
13	12.0	11.0	11.5	12.5	12.5	12.5	12.5	12.0	12.0	10.0	10.0	10.0
14	12.5	11.5	12.0	12.5	12.0	12.5	12.5	12.0	12.0	10.0	10.0	10.0
15	12.0	11.5	12.0	12.5	12.0	12.5	12.5	12.0	12.0	10.0	10.0	10.0
16	12.0	11.5	12.0	13.0	12.5	12.5	12.0	11.5	12.0	10.0	9.5	10.0
17	12.0	11.0	12.0	13.0	12.5	13.0	11.5	11.0	11.5	10.0	9.5	9.5
18	12.5	11.0	11.5	13.0	12.5	13.0	12.0	11.5	11.5	10.0	9.5	9.5
19	---	---	---	13.0	12.5	12.5	12.0	11.5	11.5	10.0	9.5	9.5
20	12.5	11.5	12.0	13.0	12.5	12.5	12.0	11.5	11.5	10.0	9.5	9.5
21	12.0	11.5	12.0	13.0	12.5	13.0	11.5	11.0	11.0	9.5	9.5	9.5
22	12.0	11.5	12.0	13.0	13.0	13.0	11.5	11.0	11.0	9.5	9.5	9.5
23	12.5	11.5	12.0	13.5	13.0	13.5	11.5	11.0	11.0	9.5	9.5	9.5
24	12.5	12.0	12.5	13.5	13.0	13.0	11.0	11.0	11.0	9.5	9.5	9.5
25	12.5	12.0	12.0	13.0	11.0	12.0	11.5	11.0	11.0	9.5	9.5	9.5
26	12.5	12.0	12.0	11.5	10.5	11.0	11.5	11.0	11.0	9.5	9.5	9.5
27	12.5	11.5	12.0	12.5	11.5	12.0	11.5	11.0	11.0	9.5	9.5	9.5
28	12.0	11.5	12.0	13.0	12.5	12.5	11.5	11.0	11.0	9.5	9.0	9.5
29	12.0	11.5	12.0	13.0	12.5	12.5	11.0	11.0	11.0	9.5	9.0	9.5
30	12.0	11.5	12.0	12.5	12.5	12.5	11.0	11.0	11.0	9.0	9.0	9.0
31	12.0	11.5	12.0	---	---	---	11.0	10.5	11.0	9.0	8.5	8.5
MONTH	12.5	11.0	---	13.5	10.5	12.5	13.0	10.5	12.0	11.0	8.5	10.0

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.0	8.5	9.0	8.5	8.0	8.5	8.5	7.5	8.0	9.0	7.5	8.0
2	9.0	8.5	9.0	8.5	8.0	8.0	8.5	8.0	8.0	9.0	7.5	8.0
3	9.0	8.5	9.0	8.0	7.5	8.0	8.5	8.0	8.0	8.5	7.5	8.0
4	8.5	8.5	8.5	8.5	7.5	8.0	8.5	8.0	8.0	8.5	7.5	7.5
5	9.0	8.5	8.5	8.5	8.0	8.0	8.5	7.5	8.0	8.5	7.0	8.0
6	9.0	8.5	8.5	8.5	8.0	8.0	8.5	7.5	8.0	8.5	7.5	8.0
7	8.5	8.5	8.5	8.5	7.5	8.0	8.5	7.5	8.0	8.5	7.0	8.0
8	8.5	8.5	8.5	8.5	7.5	8.0	8.5	7.5	8.0	8.5	7.5	8.0
9	8.5	8.5	8.5	8.5	8.0	8.5	8.5	7.5	8.0	8.5	7.5	8.0
10	8.5	8.0	8.5	8.5	8.0	8.5	8.5	7.5	8.0	8.5	7.0	7.5
11	8.5	8.0	8.5	8.5	8.0	8.5	8.5	7.5	8.0	9.5	7.0	8.0
12	8.5	8.5	8.5	8.5	8.0	8.0	8.5	7.5	8.0	8.0	7.0	7.5
13	8.5	8.5	8.5	8.5	7.5	8.0	8.5	7.5	8.0	8.5	7.5	8.0
14	8.5	8.5	8.5	8.5	8.0	8.5	8.5	7.5	8.0	8.5	7.5	8.0
15	8.5	8.5	8.5	8.5	8.0	8.0	8.5	7.5	8.0	9.0	7.5	8.5
16	8.5	8.5	8.5	8.5	8.0	8.0	8.5	7.5	8.0	9.0	7.5	8.0
17	8.5	8.0	8.5	8.5	8.0	8.5	8.5	7.5	8.0	8.0	7.5	8.0
18	8.5	8.5	8.5	8.5	8.0	8.5	8.5	7.5	8.0	8.0	7.5	7.5
19	8.5	8.0	8.5	8.5	8.0	8.0	8.0	7.5	8.0	8.0	7.5	8.0
20	8.5	8.0	8.5	8.5	8.0	8.0	8.0	7.5	7.5	8.5	7.5	8.0
21	8.5	8.5	8.5	8.5	8.0	8.0	8.5	7.0	7.5	8.5	7.5	8.0
22	8.5	8.0	8.5	8.5	7.5	8.0	8.0	7.0	7.5	8.0	7.5	8.0
23	8.5	8.0	8.5	8.5	7.5	8.0	9.0	7.5	8.0	8.5	7.5	8.0
24	9.0	8.5	8.5	8.5	---	7.5	8.0	7.0	7.5	8.0	8.0	8.0
25	8.5	8.0	8.5	8.5	---	8.0	8.5	7.0	7.5	8.5	8.0	8.0
26	8.5	8.0	8.5	8.5	7.5	8.0	8.5	7.0	7.5	8.5	8.0	8.0
27	8.5	8.0	8.5	8.0	7.5	8.0	7.5	7.0	7.0	8.5	8.0	8.0
28	8.5	8.0	8.0	8.0	6.5	7.5	8.5	7.5	8.0	8.5	7.5	8.0
29	---	---	---	8.0	7.0	7.5	8.5	8.0	8.0	8.5	7.5	8.0
30	---	---	---	8.5	7.5	8.0	8.5	7.5	8.0	9.0	7.5	8.5
31	---	---	---	8.5	7.5	8.0	---	---	---	8.5	7.5	8.0
MONTH	9.0	8.0	8.5	8.5	6.5	8.0	9.0	7.0	8.0	9.5	7.0	8.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.5	8.0	8.5	10.0	8.5	9.0	10.5	9.0	10.0	10.5	9.5	10.0
2	9.0	8.0	8.5	10.0	9.0	9.5	10.5	9.0	9.5	10.5	9.5	10.0
3	8.5	8.0	8.0	10.0	9.0	9.5	10.0	8.5	9.5	10.5	9.5	9.5
4	8.5	8.0	8.0	10.0	9.0	9.5	10.0	9.0	9.5	---	---	---
5	8.5	8.0	8.0	10.0	9.0	9.5	10.0	9.0	9.5	---	---	---
6	9.0	8.0	8.5	10.0	9.0	9.5	10.5	9.0	10.0	---	---	---
7	9.0	8.5	8.5	10.0	9.0	9.5	10.5	9.5	10.0	---	---	---
8	9.5	8.5	9.0	10.5	9.0	9.5	10.5	9.5	9.5	---	---	---
9	9.5	8.5	9.0	10.0	9.0	9.5	10.0	9.0	9.5	---	---	---
10	9.5	8.5	9.0	10.5	9.0	9.5	10.5	9.0	9.5	---	---	---
11	9.5	8.5	9.0	10.0	9.0	9.5	10.5	9.5	10.0	---	---	---
12	9.5	8.5	9.0	10.0	9.0	9.5	10.0	9.0	9.5	---	---	---
13	9.0	8.5	9.0	10.0	9.0	9.5	10.5	9.5	10.0	---	---	---
14	9.0	8.5	8.5	10.0	9.5	9.5	10.5	9.5	10.0	---	---	---
15	9.0	8.5	8.5	9.5	9.5	9.5	10.5	9.5	10.0	---	---	---
16	9.0	8.5	8.5	10.0	9.0	9.5	10.5	9.5	9.5	---	---	---
17	9.0	8.5	8.5	10.0	9.0	9.5	10.0	9.5	9.5	---	---	---
18	9.0	8.5	8.5	10.5	9.0	9.5	10.5	9.5	10.0	---	---	---
19	9.0	8.5	8.5	10.0	9.0	9.5	10.5	9.5	10.0	---	---	---
20	9.0	8.5	8.5	10.0	9.0	9.5	10.0	9.5	10.0	---	---	---
21	9.0	8.5	8.5	10.0	9.0	9.5	10.5	10.0	10.0	---	---	---
22	9.5	8.5	9.0	10.0	9.0	9.5	10.0	9.0	9.5	---	---	---
23	9.0	8.0	8.5	10.0	9.0	9.5	10.5	9.5	10.0	---	---	---
24	9.0	8.0	9.0	10.5	9.0	9.5	10.0	9.5	9.5	---	---	---
25	9.0	8.0	8.5	10.5	9.5	9.5	10.5	9.5	10.0	---	---	---
26	9.5	8.0	9.0	10.5	9.5	9.5	10.5	9.5	10.0	---	---	---
27	10.0	8.5	9.0	10.0	9.0	9.5	10.5	9.5	10.0	---	---	---
28	10.0	8.5	9.0	10.0	9.5	9.5	10.5	9.5	10.0	---	---	---
29	10.0	9.0	9.5	10.0	9.0	9.5	10.5	9.5	10.0	---	---	---
30	10.0	9.0	9.5	10.5	9.0	10.0	10.5	9.5	10.0	---	---	---
31	---	---	---	10.0	9.0	9.5	10.5	10.0	10.0	---	---	---
MONTH	10.0	8.0	8.5	10.5	8.5	9.5	10.5	8.5	10.0	---	---	---
YEAR	13.5	6.5										

09382000 PARIA RIVER AT LEES FERRY, AZ

LOCATION.--Lat 36°52'20", long 111°35'3", in NW¼NE¼ sec.13, T.40 N., R.7 E., Coconino County, Hydrologic Unit 14070007, on left bank 0.6 mi northwest of Lees Ferry, and 1.1 mi upstream from mouth.

DRAINAGE AREA.--1,410 mi^2.

PERIOD OF RECORD.--October 1923 to current year.

REVISED RECORDS.--WSP 1925: 1958(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,123.68 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 5, 1925 nonrecording gage at site 2,000 ft upstream at different datum. Oct. 13, 1925, to Sept. 11, 1929, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Oct. 1-3, 6-12, 15-19, 24-31, Nov. 1-6, 12-30, Dec. 1-3, 5-31, Jan. 1-3, 14-16, Apr. 12-15, 22-25, May 2, 28-30, June 9-23, July 26-29, Aug. 1-4, 31, and Sept. 1-3, 13-18, 21-30. Records good except for estimated daily discharges, which are fair. Diversions above station for irrigation of about 3,300 acres, mostly in southern Utah.

AVERAGE DISCHARGE.--62 years, 29.8 ft^3/s, 21,590 acre-ft/yr; median of yearly mean discharges, 26 ft^3/s, 18,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft^3/s Oct. 5, 1925, gage height, 16.3 ft, from floodmark, from rating curve extended above 2,000 ft^3/s on basis of float-area measurement of peak flow; maximum gage height, 16.65 ft Sept. 9, 1980; minimum daily discharge, 1 ft^3/s in most years prior to 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 7	1000	*416	*6.95

Minimum daily discharge, 2.7 ft^3/s May 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	20	25	10	8.6	27	27	28	21	4.2	25	12
2	30	20	20	10	17	27	26	25	13	4.1	20	15
3	60	20	20	10	17	28	27	23	7.5	3.6	15	13
4	67	20	25	10	15	26	28	14	6.2	3.5	10	10
5	35	20	25	12	11	25	28	9.9	5.2	3.3	7.0	9.9
6	30	20	20	16	16	25	27	6.8	4.4	3.3	5.2	6.2
7	25	20	25	24	20	24	27	4.9	4.2	3.2	4.8	6.0
8	25	17	25	26	28	21	27	4.5	4.0	3.2	4.8	5.6
9	20	18	25	24	37	23	27	4.0	4.0	2.9	4.8	5.4
10	20	21	20	25	38	26	25	3.9	4.0	2.9	4.8	5.6
11	20	18	30	26	33	36	21	5.6	4.2	2.9	4.8	6.2
12	27	20	25	25	26	37	15	5.2	4.0	2.9	4.4	107
13	52	25	20	23	40	33	15	4.4	4.0	8.3	4.8	28
14	44	20	15	20	44	27	10	4.2	4.0	12	4.8	15
15	30	20	15	20	50	29	10	3.3	4.0	5.6	4.8	14
16	25	20	25	20	58	33	10	2.7	4.0	4.4	4.8	14
17	20	20	15	24	62	31	8.5	2.7	4.0	3.6	5.2	13
18	25	20	20	24	53	39	15	3.2	4.3	83	5.8	12
19	30	20	25	40	47	92	37	3.2	4.3	56	5.2	41
20	30	20	50	45	38	62	39	3.5	4.3	77	6.4	41
21	33	20	30	42	39	34	31	3.7	4.3	35	5.6	20
22	33	20	20	43	32	27	25	18	4.3	127	5.2	20
23	32	20	20	41	32	25	20	13	4.6	67	4.7	20
24	25	20	15	35	31	25	20	6.8	5.0	36	4.8	18
25	25	30	20	38	27	25	15	6.2	5.8	20	4.8	18
26	25	25	15	37	28	23	15	6.8	4.8	15	4.8	17
27	25	20	15	40	27	23	32	5.8	4.7	15	4.8	16
28	25	25	20	41	27	34	35	5.0	4.7	10	126	16
29	25	25	15	33	---	49	37	5.0	4.5	11	41	16
30	25	25	15	29	---	31	32	5.0	4.5	45	18	15
31	20	---	15	17	---	24	---	6.0	---	32	14	---
TOTAL	933	629	670	830	901.6	991	711.5	243.3	161.8	702.9	386.1	555.9
MEAN	30.1	21.0	21.6	26.8	32.2	32.0	23.7	7.85	5.39	22.7	12.5	18.5
MAX	67	30	50	45	62	92	39	28	21	127	126	107
MIN	20	17	15	10	8.6	21	8.5	2.7	4.0	2.9	4.4	5.4
AC-FT	1850	1250	1330	1650	1790	1970	1410	483	321	1390	766	1100

CAL YR 1984 TOTAL 8701.7 MEAN 23.8 MAX 290 MIN 2.7 AC-FT 17260
WTR YR 1985 TOTAL 7716.1 MEAN 21.1 MAX 127 MIN 2.7 AC-FT 15300

09383000 COLORADO RIVER AT COMPACT POINT, NEAR LEES FERRY, AZ

LOCATION.--Lat 36°51'05", long 111°36'21", in NE¼SE¼ sec.23, T.40 N., R.7 E., Coconino County, Hydrologic Units 14070006, 15010001, (see REMARKS), 1.0 mi downstream from Paria River, 1.4 mi downstream from gage on Colorado River at Lees Ferry, and 29 mi downstream from Utah-Arizona State line.

DRAINAGE AREA.--112,000 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--October 1913 to current year (monthly discharge only) Prior to October 1950, published in WSP 1313.

DETERMINATION OF DISCHARGE.--There is no gage. Monthly and yearly discharge computed as the sum of flow at stations on Colorado River and Paria River at Lees Ferry.

REMARKS.--This point on the Colorado River is the dividing point between the Upper Basin and Lower Basin, as defined in the Colorado River Compact of 1922. Flow substantially regulated by Lake Powell beginning Mar. 13, 1963. (See elsewhere in this report.)

AVERAGE DISCHARGE.--49 years (water years 1914-62), 17,760 ft^3/s, 12,870,000 acre-ft/yr; 21 years (water years 1965-85), 14,210 ft^3/s, 10,295,000 acre-ft/yr.

MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	Mean	Runoff in acre-feet
October	21,760	1,338,000
November	24,790	1,475,000
December	24,380	1,499,000
CAL YR 1984	28,090	20,391,000
January	25,150	1,547,000
February	26,780	1,487,000
March	20,280	1,247,000
April	20,590	1,225,000
May	34,410	2,116,000
June	40,220	2,393,000
July	28,500	1,753,000
August	26,590	1,635,000
September	23,420	1,394,000
WTR YR 1985	26,390	19,109,000

NOTE.--Record shown is sum of flow at stations on Colorado River and Paria River at Lees Ferry.

09384000 LITTLE COLORADO RIVER ABOVE LYMAN LAKE, NEAR ST. JOHNS, AZ

LOCATION.--Lat 34°18'52", long 109°21'42", in SW¼SE¼ sec.27, T.11 N., R.28 E., Apache County, Hydrologic Unit 15020001, on left bank 0.75 mi downstream from Coyote Creek, 6 mi upstream from Lyman Dam, and 15 mi south of St. Johns. Prior to Dec. 7, 1976, at site 0.4 mi downstream.

DRAINAGE AREA.--747 mi^2.

PERIOD OF RECORD.--April 1940 to current year. Prior to October 1975 published as "above Lyman Reservoir."

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 6,010 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to December 7, 1976, water-stage recorder at site 0.4 mi downstream at datum approximately 20 ft lower, reactivated March 21, 1980. See WSP 1313 for history of changes prior to 1950.

REMARKS.--No estimated daily discharge. Records fair. Flow regulated by many small reservoirs - combined capacity, about 15,500 acre-ft. Diversions for irrigation of about 6,700 acres above station.

AVERAGE DISCHARGE.--45 years, 23.3 ft^3/s, 16,880 acre-ft/yr; median of yearly mean discharges, 16 ft^3/s, 11,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s July 25, 1940, gage height, 17.1 ft, datum then in use, from floodmarks, by slope-area measurement of peak flow and reservoir in flow studies; maximum gage height, 18.6 ft, Sept. 12, 1975, at previous site (from graph recorded to 16.4 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 13	1030	*695	a4.91	Apr. 30	0545	572	4.65
Apr. 7	0515	532	4.56	July 11	1715	452	4.35

Minimum daily discharge, 3.4 ft^3/s Sept. 7, 8, 27.
a From crest-stage gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	26	20	61	13	52	248	402	38	10	20	4.3
2	6.8	25	17	47	14	54	161	313	38	8.2	16	6.2
3	9.2	25	24	35	15	56	209	254	34	7.7	18	7.3
4	14	25	28	34	18	53	299	208	34	8.1	22	6.4
5	11	25	27	37	16	56	351	181	44	7.6	22	5.0
6	8.9	25	27	39	19	61	428	165	42	7.0	20	4.6
7	7.6	25	27	43	17	62	452	137	36	6.7	19	3.4
8	7.3	25	27	38	23	62	413	120	33	6.4	21	3.4
9	7.1	26	26	36	21	64	382	118	28	6.2	20	5.5
10	6.7	24	25	36	17	71	345	103	24	5.6	17	5.9
11	6.9	24	28	41	19	111	327	95	22	47	19	6.2
12	7.6	24	27	39	19	230	312	86	19	11	25	6.7
13	8.4	24	28	38	15	506	266	82	17	8.8	26	6.7
14	9.2	23	28	38	16	418	252	69	16	10	12	7.6
15	8.7	22	26	30	21	364	230	59	11	14	12	10
16	13	25	33	25	22	305	208	57	9.5	12	11	13
17	20	25	33	24	24	281	180	52	11	39	7.3	7.3
18	16	25	37	25	25	258	172	55	12	45	5.9	5.9
19	14	25	32	29	26	231	179	61	12	32	6.2	5.9
20	13	23	32	25	26	184	141	53	13	39	7.3	8.3
21	11	23	33	23	28	153	114	54	18	65	7.9	12
22	10	24	36	19	29	162	99	56	16	34	8.3	9.4
23	11	26	46	19	30	139	108	54	16	26	7.6	7.3
24	13	27	45	22	30	152	85	47	14	20	6.7	5.5
25	14	26	39	19	29	182	67	45	12	16	5.9	5.0
26	16	23	38	22	29	223	72	42	11	15	5.9	3.7
27	15	21	38	25	35	229	82	41	11	16	5.5	3.4
28	13	31	147	25	46	233	121	41	12	16	6.2	6.2
29	12	32	121	22	---	243	174	41	11	17	6.2	9.0
30	11	24	78	20	---	208	395	37	13	18	5.9	12
31	18	---	63	17	---	248	---	35	---	22	5.5	---
TOTAL	346.3	748	1236	953	642	5651	6872	3163	627.5	596.3	398.3	203.1
MEAN	11.2	24.9	39.9	30.7	22.9	182	229	102	20.9	19.2	12.8	6.77
MAX	20	32	147	61	46	506	452	402	44	65	26	13
MIN	6.7	21	17	17	13	52	67	35	9.5	5.6	5.5	3.4
AC-FT	687	1480	2450	1890	1270	11210	13630	6270	1240	1180	790	403

CAL YR 1984 TOTAL 7119.2 MEAN 19.5 MAX 274 MIN 2.2 AC-FT 14120
WTR YR 1985 TOTAL 21436.5 MEAN 58.7 MAX 506 MIN 3.4 AC-FT 42520

09386030 LITTLE COLORADO RIVER ABOVE ZION RESERVOIR, NEAR ST. JOHNS, AZ

LOCATION.--Lat 34°35'01", long 109°24'23", in SE¼SE¼ sec.30, T.14 N., R.28 E., Apache County, Hydrologic Unit 15020002, on downstream side of center pier of bridge on private road, 1.5 mi upstream from Carrizo Creek, 4 mi upstream from Zion Reservoir, and 5.8 mi northwest of St. Johns.

DRAINAGE AREA.--975 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharge. Records good. Diversions above station for irrigation of about 10,200 acres, including 1,500 acres served by Lyman Canal. Regulation by many reservoirs above station (combined capacity, 46,900 acre-ft), the largest of which is Lyman Lake. Records do not include flow bypassing the station through an abandoned irrigation ditch during higher stages.

AVERAGE DISCHARGE.--10 years, 12.2 ft^3/s, 8,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 582 ft^3/s Aug. 4, 1983, gage height, 3.66 ft; minimum daily, 0.04 ft^3/s Aug. 2, Sept. 7, Oct. 16-20, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 173 ft^3/s Apr. 9, gage height, 2.79 ft; minimum daily, 0.07 ft^3/s June 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	11	12	10	21	14	139	127	4.2	.11	4.5	2.2
2	14	11	11	13	10	12	139	164	4.0	.11	2.6	1.6
3	18	11	11	26	26	13	136	169	3.0	.11	2.4	1.5
4	14	11	13	10	15	13	128	161	3.8	.11	9.0	1.3
5	12	11	13	13	16	12	136	143	5.4	.13	2.0	1.3
6	10	12	12	23	13	12	152	128	5.1	.16	1.5	1.5
7	9.9	11	11	8.4	15	13	161	116	4.0	.22	1.2	1.4
8	9.8	8.5	12	11	19	13	168	94	4.3	.33	1.2	1.1
9	9.1	8.8	11	12	22	13	169	75	3.8	.49	9.9	1.0
10	9.4	8.5	11	11	23	17	170	65	3.9	.58	1.8	1.1
11	8.1	12	14	9.4	17	18	168	52	3.0	.63	19	1.8
12	11	12	14	9.3	14	16	167	46	2.3	.40	3.2	2.1
13	12	12	13	9.5	13	23	164	40	2.2	.26	2.4	1.9
14	10	12	13	10	13	34	159	32	1.3	26	2.2	1.7
15	18	12	12	10	13	89	148	28	.86	7.3	2.2	1.7
16	42	12	11	9.5	13	121	140	23	.90	7.1	2.3	2.0
17	18	13	11	8.5	13	133	131	14	.74	3.1	2.0	1.8
18	12	13	11	9.8	13	138	125	8.5	.42	1.8	2.2	1.3
19	11	13	11	11	13	138	115	6.9	.08	1.7	2.4	2.0
20	11	12	11	11	13	132	106	7.4	.08	2.5	2.7	3.7
21	17	12	11	11	17	127	93	8.2	.08	3.3	2.6	3.4
22	23	12	11	11	17	119	78	7.8	.07	15	2.2	3.2
23	14	12	14	12	14	111	63	7.3	.07	4.6	2.1	2.7
24	12	12	23	15	13	110	57	8.6	.31	2.4	2.0	2.3
25	12	12	9.9	14	13	110	50	5.3	.56	.81	2.4	1.1
26	12	12	11	21	13	113	43	3.3	1.2	.64	1.7	.84
27	12	11	12	27	16	121	49	2.8	.10	.83	2.3	1.1
28	12	11	15	20	16	130	51	4.5	.10	.92	2.7	14
29	11	12	13	17	---	134	71	4.7	.09	1.0	2.1	15
30	11	12	11	15	---	138	78	5.0	.08	9.4	2.0	3.9
31	11	---	10	15	---	138	---	5.7	---	4.8	2.3	---
TOTAL	416.3	344.8	378.9	413.4	434	2325	3554	1563.0	56.04	96.84	101.1	81.54
MEAN	13.4	11.5	12.2	13.3	15.5	75.0	118	50.4	1.87	3.12	3.26	2.72
MAX	42	13	23	27	26	138	170	169	5.4	26	19	15
MIN	8.1	8.5	9.9	8.4	10	12	43	2.8	.07	.11	1.2	.84
AC-FT	826	684	752	820	861	4610	7050	3100	111	192	201	162

CAL YR 1984 TOTAL 5764.48 MEAN 15.7 MAX 130 MIN .19 AC-FT 11430
WTR YR 1985 TOTAL 9764.92 MEAN 26.8 MAX 170 MIN .07 AC-FT 19370

09386030 LITTLE COLORADO RIVER ABOVE ZION RESERVOIR, NEAR ST. JOHNS, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1980 to current year.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
APR 1985									
25...	1630	E45	1100	8.50	12.5	16.0	290	85	75

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)
APR 1985									
25...	25	120	3	6.4	250	205	180	110	0.7

DATE	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	BORON, DISSOLVED (UG/L AS B) (01020)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
APR 1985									
25...	19	650	0.9	0.10	0.09	0.28	180	20	14

E Estimated

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM

LOCATION.--Lat 35°06'03", long 108°45'03", in NE¼ sec.17, T.10 N., R.18 W., McKinley County, Hydrologic Unit 15020004, on Zuni Indian Reservation, on left bank downstream from highway bridge on State Highway 36, 0.8 mi upstream from flow line of Black Rock Reservoir, 2.3 mi northeast of Black Rock, and 5.9 mi northeast of Zuni Pueblo.

DRAINAGE AREA.--810 mi^2, approximately.

PERIOD OF RECORD.--October 1969 to current year. Prior to October 1974 published as "above Zuni Reservoir."

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 9 to Feb. 1 and Mar. 20-29. Records good except estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--16 years, 14.9 ft^3/s, 10,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft^3/s Aug. 4, 1974, gage height, 6.61 ft, from rating curve extended above 670 ft^3/s on basis of slope-area measurements at gage heights, 4.05 ft, 3.94 ft, 5.16 ft, and 6.61 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 15	1000	266	4.13	Mar. 13	1200	*1,750	*6.10
Mar. 3	0030	168	3.77	May 3	1230	177	3.84

No flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1.7	2.1	1.3	4.0	109	112	129	1.9	1.0	9.5	.53
2	3.8	1.7	2.2	1.2	3.8	134	101	130	1.7	.91	9.0	.28
3	14	1.6	2.2	1.1	4.1	140	52	168	1.5	.68	8.7	.07
4	8.2	1.6	2.3	1.1	4.0	137	55	156	1.3	.27	9.5	.00
5	3.4	1.6	2.2	1.1	3.4	138	59	121	1.4	.02	9.8	.00
6	2.6	1.7	2.3	1.2	3.4	125	52	90	1.5	.00	10	.00
7	2.1	1.7	2.2	1.4	3.1	111	46	69	1.3	.00	9.8	.00
8	1.9	1.6	2.1	1.6	3.0	99	44	52	1.0	.00	9.7	.00
9	1.8	1.6	2.4	1.7	3.6	89	42	40	.83	.00	11	.00
10	1.7	1.5	2.3	1.8	59	80	35	31	.68	.00	10	.00
11	1.7	1.5	2.4	1.9	106	105	35	21	4.6	.00	9.8	.00
12	1.6	1.5	2.1	2.0	85	603	30	14	2.2	3.2	9.1	.02
13	1.7	1.5	2.0	2.1	69	1530	25	13	1.5	8.9	8.3	.11
14	1.6	1.4	2.0	2.2	42	964	23	11	1.5	9.2	3.9	.09
15	4.1	1.3	2.7	2.2	109	556	19	10	1.6	9.5	1.3	.53
16	5.8	1.6	2.7	2.3	39	362	17	9.3	1.4	9.8	.76	1.5
17	2.9	1.7	2.8	2.3	34	262	14	8.7	1.4	9.9	1.4	.85
18	2.3	1.7	2.8	2.4	38	216	12	7.0	1.2	10	1.3	.69
19	1.9	1.8	2.8	2.8	56	210	12	6.4	1.2	10	.99	.78
20	1.9	1.9	2.8	3.0	120	238	11	6.3	.82	10	.69	1.3
21	2.3	2.0	2.5	4.5	124	230	10	5.9	.45	10	.52	1.5
22	3.4	2.1	2.4	5.0	108	220	11	5.9	.17	11	2.5	.94
23	3.0	2.0	2.0	6.2	88	210	12	5.6	.01	21	13	.66
24	2.4	2.0	1.7	5.8	74	200	14	4.6	.00	13	9.9	.57
25	2.2	2.0	1.9	5.7	68	190	16	4.1	.00	10	6.8	.53
26	1.9	2.1	2.0	5.5	68	180	16	3.6	.00	9.8	5.4	.53
27	2.1	2.0	2.1	5.3	79	170	20	3.0	.00	9.5	4.2	.51
28	1.8	2.0	2.1	4.7	97	145	25	2.8	.00	9.4	2.9	.32
29	1.7	2.0	2.0	4.3	---	134	35	2.5	.28	9.0	1.8	.31
30	1.7	2.1	1.9	4.2	---	132	86	2.3	1.1	11	1.2	.33
31	1.7	---	1.8	4.1	---	122	---	2.5	---	11	.85	---
TOTAL	92.1	52.5	69.8	92.0	1495.4	8141	1041	1135.5	32.54	208.08	183.61	12.95
MEAN	2.97	1.73	2.25	2.97	53.4	263	34.7	36.6	1.08	6.71	5.92	.43
MAX	14	2.1	2.8	6.2	124	1530	112	168	4.6	21	13	1.5
MIN	1.6	1.3	1.7	1.1	3.0	80	10	2.3	.00	.00	.52	.00
AC-FT	183	104	138	182	2970	16150	2060	2250	65	413	364	26

CAL YR 1984 TOTAL 1466.60 MEAN 4.01 MAX 244 MIN .00 AC-FT 2910
WTR YR 1985 TOTAL 12556.48 MEAN 34.4 MAX 1530 MIN .00 AC-FT 24910

09390500 SHOW LOW CREEK NEAR LAKESIDE, AZ

LOCATION.--Lat 34°10'46", long 109°59'14", in SW¼NW¼ sec.14, T.9 N., R.22 E., Navajo County, Hydrologic Unit 15020005, on left bank 1 mi upstream from pumping plant on Show Low Lake, 1.9 mi northwest of Lakeside, 2.2 mi upstream from Jaques Dam, and 6 mi southeast of Show Low.

DRAINAGE AREA.--68.6 mi^2.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WSP 1513: 1954-56. WSP 1926: Drainage area. WRD Ariz. 1971: 1970(M).

GAGE.--Water-stage recorder and concrete-dam control with V-notch sharp-crested weir. Elevation of gage is 6,610 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 2-4, Jan. 8-23, Feb. 1-12, June 6 to July 1, July 3 to Aug. 1, Aug. 28-30, Sept. 3, 4, 15-20, 22, 23, 27. Records good except for estimated days, which are fair. Record shows inflow to Show Low Lake. Flow partly regulated by several small reservoirs, largest of which are Rainbow Lake and Scott Reservoir, combined capacity, 2,400 acre-ft. Diversions for irrigation of about 250 acres above station.

AVERAGE DISCHARGE.--32 years, 14.8 ft^3/s, 10,720 acre-ft/yr; median of yearly mean discharges, 9.7 ft^3/s, 7,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,550 ft^3/s Dec. 18, 1978 , gage height, 9.16 ft, from rating curve extended above 2,500 ft^3/s; maximum gage height, 9.53 ft Dec. 26, 1971; no flow Oct. 5, 6, Dec. 10-19, 1964, Jan. 4-15, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	unknown	unknown	unknown	Feb. 20	2245	242	3.42
Oct. 18	1530	123	3.11	Feb. 28	2145	437	3.88
Dec. 20	2215	161	3.23	Mar. 12	1030	1,940	5.99
Dec. 27	1815	*5,430	*9.08	Apr. 30	0030	340	3.67
Jan. 26	2115	282	3.52				

Minimum daily discharge, 3.3 ft^3/s Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	9.1	9.0	188	45	292	43	64	8.4	5.8	4.2	5.4
2	106	9.1	9.0	56	41	206	68	49	8.3	5.6	6.1	5.6
3	750	9.1	9.0	27	40	144	54	40	8.3	5.6	4.7	5.6
4	190	9.0	8.9	20	38	85	43	31	9.3	5.6	4.3	5.4
5	71	9.0	8.4	17	35	73	34	21	8.9	5.6	3.7	5.4
6	44	8.9	8.3	16	33	73	25	18	8.5	5.5	3.3	5.3
7	24	7.9	8.3	15	32	64	19	16	8.2	5.4	3.6	5.2
8	16	7.0	8.9	14	30	56	17	15	8.0	5.4	4.4	5.0
9	13	6.5	8.7	13	30	55	16	14	7.8	5.4	4.7	5.0
10	12	6.5	8.5	13	30	104	16	13	7.8	5.3	5.4	5.1
11	10	8.0	28	12	31	264	15	12	7.6	5.2	4.9	6.8
12	9.9	8.3	68	12	35	1270	15	13	7.4	5.2	4.3	6.0
13	9.6	8.4	60	11	44	297	15	13	7.4	5.1	4.0	4.9
14	8.8	8.2	48	11	58	127	14	12	7.2	5.0	3.7	5.1
15	20	8.3	44	11	74	92	14	12	7.2	5.0	3.8	6.2
16	56	8.3	39	10	97	98	14	11	7.0	4.9	3.6	7.4
17	56	8.9	38	10	124	85	13	11	7.0	4.9	3.5	8.5
18	92	8.6	39	10	147	60	16	11	6.8	4.8	3.7	9.6
19	69	7.9	49	10	155	56	14	10	6.8	4.8	3.9	11
20	44	7.3	115	10	185	60	14	10	6.8	4.7	4.1	12
21	27	6.9	104	10	180	64	14	9.8	6.6	4.6	4.0	13
22	20	7.6	64	10	113	54	15	9.4	6.6	4.6	4.2	12
23	17	9.3	50	11	77	46	14	9.3	6.4	4.6	4.5	12
24	17	9.7	40	26	66	41	14	9.8	6.4	4.5	3.9	11
25	15	10	35	21	77	38	13	9.7	6.2	4.5	4.1	11
26	16	9.3	29	170	104	36	16	9.2	6.2	4.4	5.2	11
27	15	9.0	1390	183	157	31	17	8.9	6.2	4.4	5.3	15
28	13	9.0	3060	96	387	24	32	8.5	6.0	4.4	5.0	19
29	12	9.0	1740	70	---	29	151	8.6	6.0	4.3	5.0	16
30	10	9.0	1080	58	---	27	187	8.8	6.0	4.3	5.0	12
31	9.2	---	639	49	---	26	---	8.7	---	4.3	5.0	---
TOTAL	1780.4	253.1	8846.0	1190	2465	3977	952	496.7	217.3	153.7	135.1	262.5
MEAN	57.4	8.44	285	38.4	88.0	128	31.7	16.0	7.24	4.96	4.36	8.75
MAX	750	10	3060	188	387	1270	187	64	9.3	5.8	6.1	19
MIN	7.9	6.5	8.3	10	30	24	13	8.5	6.0	4.3	3.3	4.9
AC-FT	3530	502	17550	2360	4890	7890	1890	985	431	305	268	521

CAL YR 1984 TOTAL 12991.5 MEAN 35.5 MAX 3060 MIN 2.6 AC-FT 25770
WTR YR 1985 TOTAL 20728.8 MEAN 56.8 MAX 3060 MIN 3.3 AC-FT 41120

09392000 SHOW LOW CREEK BELOW JAQUES DAM, NEAR SHOW LOW, AZ

LOCATION.--Lat 34°11'47", long 110°00'13", in NW¼ sec.10, T.9 N., R.22 E., Navajo County, Hydrologic Unit 15020005, on right bank just downstream from Jaques Dam, 3.5 mi northwest of Lakeside, and 4.5 mi southeast of Show Low.

DRAINAGE AREA.--73.0 mi^2.

PERIOD OF RECORD.--November 1941 to January 1945, June 1953 to September 1955 (monthly discharge only), October 1955 to current year. Monthly discharge only November 1941 to January 1945, published in WSP 1313. Published as "at Jaques damsite, near Lakeside" 1941-45.

REVISED RECORDS.--WSP 1926: Drainage area.

GAGE.--Water-stage recorder and sharp-crested weir, with supplementary water-stage recorder on lake for recording flow over concrete spillway. Elevation of gage is 6,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. November 1941 to January 1945 nonrecording gage at site 100 ft upstream at different datum.

REMARKS.--Estimated daily discharges (flowover spillway): Dec. 27 to Mar. 6, Apr. 5-25. Records good except for estimates of flow over spillway, which are fair. Record since 1953 shows release from Show Low Lake. Flow regulated by several reservoirs, largest of which are Show Low Lake, completed in 1953; Rainbow Lake, completed prior to 1941; and Scott Reservoir, completed in 1946 (combined capacity, 8,800 acre-ft). Diversions for irrigation of about 250 acres above Show Low Lake and diversion by pumping of floodwater stored in Show Low Lake to Forestdale Creek in Salt River basin (see record for Forestdale Creek diversion from Show Low Creek, near Show Low, elsewhere in this report).

AVERAGE DISCHARGE.--32 years (water years 1954-85), 8.96 ft^3/s, 6,490 acre-ft/yr; median of yearly mean discharges, 3.2 ft^3/s, 2,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft^3/s, spillway flow entering 0.2 mi downstream from station, Dec. 27, 1984, lake elevation, 6,573.72 ft, from rating curve extended above 270 ft^3/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 18, 1952, discharge, 6,250 ft^3/s at site 5 mi downstream at Show Low, is the largest since at least 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,800 ft^3/s, spillway flow entering 0.2 mi downstream from station, Dec. 27, lake elevation, 6,573.72 ft, from rating curve extended above 270 ft^3/s; maximum daily discharge, 3,080 ft^3/s Dec. 28, lake elevation, 6,572.91 ft; minimum daily, 1.2 ft^3/s Sept. 21-30.

09391000. SHOW LOW LAKE.--A lake on Show Low Creek, formed by Jaques Dam, in NW¼ sec.10, T.9 N., R.22 W., Navajo County, 4.5 mi southeast of Show Low; dam completed and storage began in spring of 1953. Total capacity to spillway, 6,176 acre-ft, consisting of 1,070 acre-ft dead storage below elevation 6,535.0 ft, sill of outlet structure, and 5,106 acre-ft usable storage between elevation 6,535.0 and 6,570.0 ft, sill of overflow spillway. Capacity table prepared by Leeds, Hill, and Jewett, consulting engineers, from surveys by the firm. Water cannot be pumped when lake elevation is below 6,538.5 ft, sill of intake to pumping plant, but can be released to river channel down to elevation 6,535.0 ft. Partial listing of periodic observations made by Navapache Electric Co. and Geological Survey were as follows:

Date	Elevation (feet)	Usable contents (acre-feet)
Oct. 1, 1984	6,546.5	2,350
Nov. 1	6,557.9	4,020
Nov. 15	6,556.2	3,740
Dec. 1	6,554.5	3,480
Dec. 15	6,555.5	3,630
Jan. 4, 1985	6,570.1	6,200
Jan. 31	6,570.2	6,220
Mar. 5	6,570.3	6,240
Mar. 23	6,570.2	6,220
Apr. 4	6,570.2	6,220
Apr. 25	6,570.1	6,200
May 1, 1985	6,570.3	6,240
May 24	6,570.1	6,200
June 1	6,569.6	6,100
June 15	6,566.0	5,420
July 1	6,562.3	4,760
July 14	6,559.6	4,300
Aug. 1	6,557.2	3,900
Aug. 15	6,555.2	3,590
Sept. 1	6,551.5	3,040
Sept. 15	6,549.1	2,700

09392000 SHOW LOW CREEK BELOW JAQUES DAM, NEAR SHOW LOW, AZ--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.1	2.1	280	45	290	47	80	9.0	7.9	4.7	6.0
2	1.9	2.1	2.1	95	40	210	76	50	9.0	7.0	2.6	6.0
3	1.9	2.1	2.1	40	40	140	66	40	9.0	8.0	2.2	6.0
4	2.0	2.1	2.1	20	40	85	51	30	9.0	8.0	2.0	6.0
5	2.0	2.1	2.1	16	35	76	30	20	9.0	8.0	2.0	6.0
6	2.0	2.1	2.0	16	30	76	25	18	9.0	8.0	5.0	6.0
7	2.0	2.1	2.0	14	30	66	20	16	9.0	8.0	6.0	6.0
8	2.0	2.1	2.0	14	30	58	17	15	8.9	8.0	3.5	6.0
9	2.0	2.1	2.0	12	30	54	16	14	8.8	8.0	2.0	6.0
10	2.0	2.1	2.0	12	30	101	16	13	8.8	8.0	2.3	6.0
11	2.0	2.1	2.0	12	30	217	15	12	8.8	8.0	3.0	6.0
12	2.0	2.1	2.0	12	35	1130	15	13	8.8	7.9	4.1	6.0
13	2.0	2.1	2.0	11	40	306	15	13	8.8	7.8	5.0	6.0
14	2.1	2.1	2.0	11	60	132	14	12	8.8	7.8	6.2	6.0
15	2.1	2.1	2.1	11	75	101	14	12	8.8	7.8	6.9	6.0
16	2.1	2.1	2.1	10	100	106	14	11	8.8	7.8	6.9	6.0
17	2.1	2.1	2.1	10	120	96	13	11	8.8	7.8	6.9	6.0
18	2.1	2.1	2.1	10	150	71	16	11	8.8	7.8	6.9	4.7
19	2.1	2.1	2.1	10	155	66	14	10	8.8	4.4	6.9	2.8
20	2.1	2.1	2.1	10	185	71	14	10	8.7	2.6	6.9	1.6
21	2.1	2.1	2.1	10	180	76	14	10	8.6	2.6	6.7	1.2
22	2.1	2.1	2.1	10	110	71	15	9.0	8.5	2.6	6.7	1.2
23	2.1	2.1	2.1	11	75	54	14	9.0	8.5	2.6	6.6	1.2
24	2.1	2.1	2.3	25	65	37	14	10	8.5	5.4	6.6	1.2
25	2.1	2.1	2.3	20	80	33	13	10	8.5	6.4	6.6	1.2
26	2.1	2.1	2.3	170	100	33	16	9.0	8.5	6.4	6.6	1.2
27	2.1	2.1	700	180	160	33	17	9.0	8.5	6.4	6.6	1.2
28	2.1	2.1	3080	100	390	33	32	9.0	8.5	6.4	6.2	1.2
29	2.1	2.1	1740	70	---	30	150	9.0	8.5	6.4	6.2	1.2
30	2.1	2.1	1080	60	---	30	190	9.0	8.5	6.3	6.2	1.2
31	2.1	---	640	50	---	30	---	9.0	---	6.2	6.2	---
TOTAL	63.5	63.0	7294.3	1332	2460	3912	983	513.0	262.5	206.3	163.2	123.1
MEAN	2.05	2.10	235	43.0	87.9	126	32.8	16.5	8.75	6.65	5.26	4.10
MAX	2.1	2.1	3080	280	390	1130	190	80	9.0	8.0	6.9	6.0
MIN	1.9	2.1	2.0	10	30	30	13	9.0	8.5	2.6	2.0	1.2
AC-FT	126	125	14470	2640	4880	7760	1950	1020	521	409	324	244

CAL YR 1984 TOTAL 8731.25 MEAN 23.9 MAX 3080 MIN .69 AC-FT 17320
WTR YR 1985 TOTAL 17375.9 MEAN 47.6 MAX 3080 MIN 1.2 AC-FT 34460

09393500 SILVER CREEK NEAR SNOWFLAKE, AZ

LOCATION.--Lat 34°40'00", long 110°02'30", in SW¼NW¼ sec.29, T.15 N., R.22 E., Navajo County, Hydrologic Unit 15020005, on left bank 6 mi upstream from mouth and 11 mi north of Snowflake.

DRAINAGE AREA.--886 mi^2.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,204.1 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Apr. 4, 7-9, 18. Records good. Diversions for irrigation above station of about 6,600 acres. Flow regulated by several reservoirs - combined capacity, about 13,700 acre-ft, excluding Lone Pine Reservoir, but including 6,176 acre-ft in Show Low Lake.

AVERAGE DISCHARGE.--35 years, 19.6 ft^3/s, 14,200 acre-ft/yr; median of yearly mean discharges, 14 ft^3/s, 10,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft^3/s Jan. 19, 1952, gage height, 18.0 ft, from rating curve extended above 4,400 ft^3/s on basis of peak discharge for former station near Woodruff; no flow for several days in water years 1971, 1974-78, 1980-82.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharges (ft^3/s)	Gage Height (ft)
Dec. 27	2300	*5,840	*13.22

Minimum daily discharge, 0.36 ft^3/s July 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	9.7	9.7	117	85	182	67	54	6.0	1.2	34	14
2	39	8.2	8.5	102	72	171	58	60	4.3	1.2	26	9.7
3	267	9.7	8.2	92	74	147	58	57	2.7	1.4	24	9.7
4	212	8.2	9.7	92	75	137	52	52	2.2	.83	16	10
5	120	8.2	13	86	72	114	48	56	2.5	.58	9.1	6.0
6	77	8.2	9.7	84	66	107	47	52	3.6	1.0	6.5	7.9
7	39	7.3	10	81	65	105	46	45	4.0	.58	4.7	7.9
8	24	7.0	10	80	64	97	46	27	3.6	.36	15	7.6
9	22	8.8	10	78	61	91	32	12	3.6	1.0	31	6.2
10	20	8.2	9.4	74	57	85	18	7.0	2.4	.58	25	13
11	17	8.5	11	73	53	82	9.4	12	2.5	4.3	18	21
12	17	8.2	12	72	51	235	7.6	5.7	2.0	7.7	10	18
13	18	8.2	14	69	41	543	7.9	2.8	3.4	20	8.5	12
14	20	8.8	15	68	31	272	6.8	2.4	2.4	5.0	7.6	12
15	25	8.8	16	66	41	162	5.7	5.0	1.8	2.7	9.1	12
16	39	8.5	15	64	63	136	3.6	7.9	1.6	3.0	7.6	18
17	20	9.4	13	61	69	139	2.8	7.3	1.8	3.8	5.2	18
18	14	8.2	12	57	102	131	2.6	6.0	5.0	24	3.4	19
19	13	7.9	12	53	115	110	2.4	6.5	2.5	63	5.7	33
20	13	9.1	12	37	115	101	2.2	6.0	1.9	81	12	100
21	14	9.1	12	21	115	96	2.0	6.2	2.0	73	7.9	33
22	13	8.2	65	18	122	92	1.9	5.2	1.9	33	12	28
23	13	8.2	48	17	121	88	2.2	3.2	1.8	36	7.0	26
24	13	11	23	17	111	85	3.0	3.2	1.4	14	4.3	23
25	13	9.1	18	18	99	80	6.0	3.2	1.1	14	4.7	20
26	12	9.1	15	25	118	78	3.8	3.4	1.0	8.8	31	23
27	12	9.7	455	173	155	76	3.8	2.7	1.1	6.2	19	19
28	11	10	1990	224	160	71	11	2.7	1.1	5.2	14	22
29	11	11	601	147	---	73	34	2.7	1.4	6.2	12	37
30	12	10	220	117	---	74	45	3.8	1.1	26	9.4	25
31	11	---	140	101	---	69	---	3.8	---	33	12	---
TOTAL	1175	264.5	3817.2	2384	2373	4029	635.7	523.7	73.7	478.63	411.7	611.0
MEAN	37.9	8.82	123	76.9	84.7	130	21.2	16.9	2.46	15.4	13.3	20.4
MAX	267	11	1990	224	160	543	67	60	6.0	81	34	100
MIN	11	7.0	8.2	17	31	69	1.9	2.4	1.0	.36	3.4	6.0
AC-FT	2330	525	7570	4730	4710	7990	1260	1040	146	949	817	1210

CAL YR 1984 TOTAL 10542.11 MEAN 28.8 MAX 1990 MIN .00 AC-FT 20910
WTR YR 1985 TOTAL 16777.13 MEAN 46.0 MAX 1990 MIN .36 AC-FT 33280

09394500 LITTLE COLORADO RIVER AT WOODRUFF, AZ

LOCATION.--Lat 34°48'58", long 110°02'37", in NE¼SW¼ sec.17, T.16 N., R.22 E., Navajo County, Hydrologic Unit 15020002, on left bank at abandoned county road bridge in Woodruff, 3.7 mi downstream from Silver Creek.

DRAINAGE AREA.--8,100 mi^2, approximately.

PERIOD OF RECORD.--March to May 1905; June to July 1905 (gage heights only); August 1905 to May 1907; July 1907 to April 1908, July to October 1908, December 1908, and December 1915 to September 1916 (gage heights only); October 1916 to August 1917 (monthly discharge only); September 1917 to March 1918, December 1918 to December 1919, April 1929 to December 1933, September 1935 to current year. Published as "near Woodruff" 1916-19, 1929-48.

REVISED RECORDS.--WSP 1049: 1917. WSP 1213: 1906, 1919(M).

GAGE.--Water-stage recorder. Datum of gage is 5,130.3 ft above National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Sept. 22, 1949.

REMARKS.--Estimated daily discharges: Oct. 7-15, 18-31, Dec. 7-13, Jan. 1-3, 21-26, Feb. 1-9, 12 and Sept. 13-24. Records good except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 22,000 acres including a pump installation 1,000 ft upstream installed in spring of 1973. Some regulation by reservoirs above station; combined capacity, about 73,000 acre-ft, excluding Lone Pine Reservoir.

AVERAGE DISCHARGE.--56 years (water years 1906, 1917, 1930-33, 1936-85), 54.2 ft^3/s, 39,300 acre-ft/yr; median of yearly mean discharges, 45 ft^3/s, 32,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined, occurred Jan. 19, 1916; maximum discharge recorded, 25,000 ft^3/s Dec. 5, 1919; maximum gage height, 22.9 ft from high-water mark in gage well, Dec. 19, 1978; no flow at times in most years prior to 1960 and in 1974, 1976, and 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1800	2,100	11.39
Dec. 28	0515	*6,780	*18.59

Minimum daily discharge, 0.72 ft^3/s June 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	21	18	150	98	252	310	159	7.1	1.8	100	62
2	219	18	16	130	92	267	328	161	8.4	2.3	43	34
3	1450	19	16	113	86	229	320	155	5.5	2.1	40	19
4	784	18	16	107	81	198	310	143	5.9	1.7	29	10
5	280	16	19	104	76	176	296	149	5.2	1.8	23	7.5
6	180	16	20	100	73	151	278	161	5.2	1.7	22	7.5
7	120	16	19	99	70	159	262	194	5.5	3.0	22	7.5
8	90	15	19	102	68	163	249	205	5.2	1.3	21	7.5
9	68	15	19	97	67	147	236	198	5.2	1.2	24	6.7
10	54	13	19	94	291	137	229	198	3.6	2.8	30	5.2
11	46	13	19	89	176	139	226	187	3.4	4.9	18	13
12	38	13	19	89	94	147	222	159	3.4	5.5	15	15
13	34	13	19	85	72	451	239	135	3.8	18	8.4	11
14	32	13	28	82	64	632	259	116	3.6	7.5	8.8	11
15	31	13	40	77	69	350	275	113	3.4	4.9	6.7	11
16	442	13	34	77	69	272	278	111	3.9	4.1	8.4	16
17	285	15	30	72	107	249	270	109	3.2	3.9	6.7	16
18	160	15	23	69	141	345	257	109	2.6	24	5.5	16
19	90	13	54	67	176	874	249	107	2.6	149	4.4	30
20	66	13	40	56	169	834	217	111	2.8	180	6.7	110
21	57	15	29	38	174	598	194	80	2.6	120	8.4	60
22	48	15	53	27	167	479	171	31	2.3	339	8.8	40
23	45	15	58	25	182	436	157	23	2.4	143	8.8	28
24	39	16	28	24	171	403	145	18	2.0	139	5.2	23
25	36	16	26	23	159	379	129	23	1.1	135	3.9	18
26	33	15	24	40	149	364	116	27	.72	133	19	20
27	30	13	21	353	210	356	87	13	.72	131	19	19
28	28	16	3040	476	236	334	87	9.2	.87	127	12	13
29	25	19	773	391	---	310	460	7.5	1.6	120	9.2	106
30	24	16	315	214	---	293	356	5.9	3.2	259	9.2	43
31	23	---	212	120	---	293	---	6.7	---	270	16	---
TOTAL	5081	457	5066	3590	3607	10417	7212	3224.3	106.81	2337.5	562.1	785.9
MEAN	164	15.2	163	116	129	336	240	104	3.56	75.4	18.1	26.2
MAX	1450	21	3040	476	291	874	460	205	8.4	339	100	110
MIN	23	13	16	23	64	137	87	5.9	.72	1.2	3.9	5.2
AC-FT	10080	906	10050	7120	7150	20660	14310	6400	212	4640	1110	1560

CAL YR 1984 TOTAL 45884.03 MEAN 125 MAX 4700 MIN .45 AC-FT 91010
WTR YR 1985 TOTAL 42446.61 MEAN 116 MAX 3040 MIN .72 AC-FT 84190

09396100 PUERCO RIVER NEAR CHAMBERS, AZ

LOCATION.--Lat 35°10'42", long 109°27'15", in SW¼NW¼ sec.35, T.21 N., R.27 E., Apache County, Hydrologic Unit 15020007, on upstream side of right abutment of Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.5 mi southwest of Chambers.

DRAINAGE AREA.--2,160 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Water years 1971-72 (annual maximums only), January 1973 to current year (discharge above 500 ft^3/s only).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,705 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges; once daily discharges above 500 ft^3/s are published. Records poor. Small diversions above station for irrigation and livestock. Red Lake, near the headwaters of Black Creek, was built in 1954; the capacity was 9,700 acre-ft, but capacity may have been reduced by silting.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft^3/s Sept. 30, 1971, gage height, 9.65 ft; no flow observed on many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 3	0815	4,930	6.41

No flow for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	620	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	774	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	504	---	---	---	---	---
11	---	---	---	---	---	565	575	---	---	---	---	---
12	---	---	---	---	---	1140	527	---	---	---	---	---
13	---	---	---	---	---	1070	506	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	575	---	564	---	---	---	---	---
17	---	---	---	---	592	615	---	---	---	---	---	---
18	---	---	---	---	702	611	---	---	---	---	---	---
19	---	---	---	---	532	559	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	527	---	---	---	---	---
29	---	---	---	---	---	---	1130	---	---	---	---	---
30	---	---	---	---	---	---	732	---	---	750	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

09397300 LITTLE COLORADO RIVER NEAR JOSEPH CITY, AZ

LOCATION.--Lat 34°54'04", long 110°15'17", in NE¼SE¼ sec.6, T.17 N., R.20 E., Navajo County, Hydrologic Unit 15020008, on left bank just upstream from diversion dam, 5.4 mi west of Holbrook, 5.7 mi southeast of Joseph City, and 8.5 mi downstream from Puerco River.

DRAINAGE AREA.--12,200 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1973 to current year (daily discharge only for those days on which instantaneous discharge exceeds 500 ft^3/s).

GAGE.--Water-stage recorder, crest-stage gage, and concrete diversion dam. Datum of gage is 5,031.10 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Jan. 9, 1980, on right bank at same datum.

REMARKS.--Estimated daily discharges: Oct. 3, Dec. 13-14, 28-31, Jan. 10, 27, Feb. 10, 11, 16-20, Mar. 30 to Apr. 17, Sept. 1, 18, and 19. Records poor. Published record includes only those days when instantaneous discharge over the crest of the dam exceeds 500 ft^3/s. Diversions above station for irrigation of about 23,000 acres, diversions at dam on right bank of most low flows for irrigation of about 1,500 acres in vicinity of Joseph City. Some regulation by reservoirs; combined capacity of principal reservoirs, about 83,000 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,400 ft^3/s Dec. 19, 1978, gage height, 7.64 ft, from rating curve extended above 7,400 ft^3/s on basis of slope-area measurement at gage height, 6.82 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 60,000 ft^3/s was determined for peak of Sept. 19, 1923, at Holbrook (see prior records for sta 09397000, Little Colorado River at Holbrook, for this peak and other peaks 1905-6, 1949-73).

EXTREMES FOR CURRENT YEAR.--Maximum discharge (*) and peak discharges above base of 5,000 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1800	8,680	6.78	Apr. 29	0730	*9,110	6.96
Dec. 28	0800	6,020	5.67	Sept. 20	0800	6,100	5.70

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	560	585	---	---	716	367
2	---	---	---	---	---	---	570	---	---	---	---	---
3	3510	---	---	---	---	392	630	---	---	---	305	---
4	1740	---	---	---	---	---	560	---	---	---	889	---
5	358	---	---	---	---	---	500	---	---	---	366	---
6	---	---	---	---	---	---	520	---	---	---	---	---
7	---	---	---	---	---	---	550	---	---	---	---	---
8	---	---	---	---	---	---	580	---	---	---	---	---
9	---	---	---	---	---	---	620	---	---	---	---	---
10	---	---	---	290	614	---	650	---	---	---	---	---
11	---	---	---	---	306	---	760	---	---	---	---	---
12	---	---	---	---	---	629	730	---	---	282	---	---
13	---	---	129	---	---	2260	760	---	---	---	---	---
14	---	---	394	---	---	970	760	---	---	---	---	---
15	---	---	---	---	---	602	760	---	---	---	---	---
16	---	---	---	---	319	936	790	---	---	---	---	---
17	---	---	---	---	600	585	730	---	---	---	---	239
18	---	---	---	---	488	805	544	---	---	---	---	1450
19	---	---	---	---	710	1200	531	---	---	---	---	2340
20	---	---	---	---	420	840	---	---	---	467	---	279
21	---	---	---	---	---	805	---	---	---	565	---	---
22	---	---	---	---	---	876	---	---	---	845	---	---
23	---	---	---	---	---	788	---	---	---	329	---	---
24	---	---	---	---	---	754	558	---	---	---	---	---
25	---	---	---	---	---	644	---	---	---	---	---	---
26	---	---	---	---	---	690	---	---	---	---	---	---
27	---	---	---	445	---	674	274	---	---	---	---	---
28	---	---	2830	722	---	659	659	---	---	---	---	---
29	---	---	1490	---	---	835	3940	---	---	---	---	---
30	---	---	684	---	---	1130	1390	---	---	1200	---	---
31	---	---	250	---	---	492	---	---	---	1260	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

09397300 LITTLE COLORADO RIVER NEAR JOSEPH CITY, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since October 1981.

REMARKS.--Suspended-sediment load computed from load-discharge relation curves. Published record includes only those days on which instantaneous discharge exceeds 500 ft^3/s. See remarks for water-discharge records.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT DISCHARGE: Maximum daily, 349,000 tons Apr. 29.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	30400	32100	---	---	97300	44200
2	---	---	---	---	---	---	31100	---	---	---	---	---
3	635000	---	---	---	---	19500	35300	---	---	---	35500	---
4	227000	---	---	---	---	---	30400	---	---	---	126000	---
5	42900	---	---	---	---	---	26400	---	---	---	44000	---
6	---	---	---	---	---	---	27700	---	---	---	---	---
7	---	---	---	---	---	---	29800	---	---	---	---	---
8	---	---	---	---	---	---	31800	---	---	---	---	---
9	---	---	---	---	---	---	34600	---	---	---	---	---
10	---	---	---	13400	34200	---	36700	---	---	---	---	---
11	---	---	---	---	14300	---	44600	---	---	---	---	---
12	---	---	---	---	---	35200	42400	---	---	32400	---	---
13	---	---	4860	---	---	174000	44600	---	---	---	---	---
14	---	---	19600	---	---	60500	44600	---	---	---	---	---
15	---	---	---	---	---	33300	44600	---	---	---	---	---
16	---	---	---	---	15100	57900	46800	---	---	---	---	---
17	---	---	---	---	33200	32100	42400	---	---	---	---	---
18	---	---	---	---	25600	47900	29400	---	---	---	---	26700
19	---	---	---	---	41000	79000	28500	---	---	---	---	224000
20	---	---	---	---	21200	50500	---	---	---	58800	---	399000
21	---	---	---	---	---	47900	---	---	---	73000	---	32000
22	---	---	---	---	---	53300	---	---	---	118000	---	---
23	---	---	---	---	---	46700	---	---	---	40500	---	---
24	---	---	---	---	---	44200	30300	---	---	---	---	---
25	---	---	---	---	---	36300	---	---	---	---	---	---
26	---	---	---	---	---	39500	---	---	---	---	---	---
27	---	---	---	22800	---	38400	12500	---	---	---	---	---
28	---	---	231000	41800	---	37300	37300	---	---	---	---	---
29	---	---	103000	---	---	50200	349000	---	---	---	---	---
30	---	---	39100	---	---	73200	94900	---	---	179000	---	---
31	---	---	11100	---	---	25900	---	---	---	190000	---	---

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 4,588,860

09398300 BLUE RIDGE RESERVOIR NEAR PINE, AZ

LOCATION.--Lat 34°33'19", long 111°11'00", in NE¼SE¼ sec.33, T.14 N., R.11 E., Coconino County, Hydrologic Unit 15020008, in Coconino National Forest, on upstream side of left end of spillway structure of Blue Ridge Dam on East Clear Creek, at mouth of General Springs Canyon, 7.3 mi east of Clints Well and 20 mi northeast of Pine.

DRAINAGE AREA.--71.1 mi^2.

PERIOD OF RECORD.--December 1964 to March 1965 (periodic elevations only), April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,620 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Apr. 2, 1965, nonrecording-gage readings (at intervals of 3 to 8 days) at NGVD.

REMARKS.--Reservoir is formed by a concrete arch dam. Dam completed and storage began in December 1964. Total capacity is 19,500 acre-ft at elevation 6,735 ft, of which 15,000 acre-ft is usable storage below 6,720 ft, the spillway crest. Drawdown below 6,646.3 ft, 2,620 acre-ft restricted by sill at mouth of diversion tunnel since November 1981. Reservoir serves as a basin from which water is pumped to the East Verde River. (See records for East Verde River diversion from East Clear Creek, near Pine.) Release is possible through valve in base of dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 16,200 acre-ft Feb. 19, 1980, elevation, 6,724.12 ft; minimum contents since reservoir filled (April 1965), 1,450 acre-ft Nov. 18-27, 1981; minimum elevation, 6,630.75 ft Nov. 26, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,330 acre-ft Mar. 12, elevation, 6,721.24 ft; minimum, 2,630 acre-ft Nov. 30, elevation, 6,646.4 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on surveys by Leeds, Hill, and Jewett, Inc., January 1962)

6,640	2,120	6,700	10,260
6,660	3,920	6,720	15,000
6,680	6,580	6,730	17,960

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	15130	---	15130	---	---	12470	---
2	---	---	---	---	---	15140	---	---	---	---	12450	---
3	---	---	---	---	---	15100	---	---	---	---	12430	---
4	---	---	---	---	---	15080	---	---	14600	---	12380	---
5	---	---	---	---	---	15070	---	---	---	---	12340	---
6	---	---	---	---	---	15040	---	---	14560	---	12300	---
7	---	---	---	---	---	15030	---	---	---	---	12280	---
8	---	---	---	---	---	15030	---	---	---	---	12250	---
9	---	---	---	---	---	15070	---	---	---	---	12200	---
10	---	---	---	---	---	15230	---	---	---	---	12160	---
11	---	---	---	---	---	15280	---	---	---	---	12120	---
12	---	---	---	---	13310	15330	---	---	---	---	12070	---
13	---	---	---	---	---	15220	---	---	---	---	12010	---
14	---	---	---	---	---	15190	---	---	---	---	11970	---
15	2690	---	---	---	---	15170	---	14970	---	---	11920	---
16	2690	---	---	---	---	15160	15100	---	15000	---	11890	---
17	2710	---	---	---	---	15160	---	---	---	---	11850	10730
18	2790	---	---	---	---	15200	---	---	---	---	11820	---
19	2810	---	---	---	---	15180	---	---	---	---	11780	---
20	2810	---	---	---	---	15190	---	---	---	---	---	---
21	---	---	---	---	---	15210	---	---	---	---	11760	---
22	---	---	---	---	---	15200	---	---	---	---	---	---
23	---	---	---	---	---	15190	---	---	---	---	---	---
24	---	---	---	---	---	15220	---	---	---	---	---	---
25	---	---	---	---	---	15250	---	---	---	---	---	---
26	---	---	---	---	---	15260	---	---	---	12730	---	---
27	---	---	---	---	---	15270	---	---	---	---	---	---
28	---	---	---	---	15130	15270	---	---	---	---	---	---
29	---	---	---	---	---	15220	---	---	---	---	---	---
30	2720	2630	---	---	---	15190	15070	---	14740	12580	---	9660
31	2690	---	12200	13320	---	15180	---	14700	---	12510	11320	---
MAX	---	---	---	---	---	15330	---	---	---	---	---	---
MIN	---	---	---	---	---	15030	---	---	---	---	---	---
(*)	6647.1	6646.4	6708.75	6713.42	6720.50	6720.70	6720.27	6718.84	6719.00	6710.04	6705.01	6697.00
(**)	+40	-60	+9570	+1120	+1810	+50	-110	-370	+40	-2230	-1190	-1660

CAL YR 1984 ** -1290
WTR YR 1985 ** +7010

* Elevation, in feet, at end of month.
** Change in contents, in acre-feet.

Note.--No gage-height record on days when no values of contents are listed except at monthend, when contents are estimated.

09398500 CLEAR CREEK BELOW WILLOW CREEK, NEAR WINSLOW, AZ

LOCATION.--Lat 34°40'03", long 111°00'25", in SW¼SE¼ sec.19, T.15 N., R.13 E., Coconino County, Hydrologic Unit 15020008, in Apache-Sitgreaves National Forest, on right bank 2 mi downstream from Willow Creek and 30 mi southwest of Winslow.

DRAINAGE AREA.--321 mi^2.

PERIOD OF RECORD.--June 1947 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,957 ft above National Geodetic Vertical Datum of 1929, from Topographic Division by photogrammetry.

REMARKS.--Estimated daily discharges: Nov. 27, Jan. 3-7, 13, 14, and Feb. 1-14. Records good except for periods of estimated record, which are fair. Flow is partially controlled by Blue Ridge Reservoir (usable capacity, 15,000 acre-ft) about 20 mi upstream. (See sta 09398300.) Diversion to East Verde River from Blue Ridge Reservoir. (See sta 09507580.)

AVERAGE DISCHARGE (unadjusted for diversion or storage).--38 years, 87.5 ft^3/s, 63,390 acre-ft/yr; median of yearly mean discharges, 63 ft^3/s, 45,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft^3/s Dec. 18, 1978, gage height, 22.32 ft, from rating curve extended above 6,000 ft^3/s; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	2345	4,460	12.94	Apr. 5	0645	1,150	8.36
Mar. 12	0730	*4,750	*13.22	Apr. 23	1115	548	6.75

No flow Oct. 1-3 and June 11 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	4.7	1.5	278	35	452	363	298	.39	.00	.00	.00
2	.00	3.7	1.3	140	35	580	469	196	.29	.00	.00	.00
3	.00	3.3	1.2	120	35	530	697	164	.22	.00	.00	.00
4	84	2.7	1.3	120	35	357	967	132	.18	.00	.00	.00
5	117	2.1	1.3	110	35	298	1010	103	.17	.00	.00	.00
6	64	1.8	1.3	110	35	269	979	82	.29	.00	.00	.00
7	38	1.6	1.4	100	35	226	907	64	.33	.00	.00	.00
8	25	1.3	1.8	79	38	212	844	50	.24	.00	.00	.00
9	17	.98	2.2	59	38	200	789	39	.14	.00	.00	.00
10	12	.73	34	51	36	396	746	32	.04	.00	.00	.00
11	8.3	.57	56	34	35	1350	629	25	.00	.00	.00	.00
12	6.8	.47	284	35	34	3540	528	21	.00	.00	.00	.00
13	6.1	.40	250	30	35	1750	447	17	.00	.00	.00	.00
14	9.1	.35	154	30	42	1060	378	14	.00	.00	.00	.00
15	13	.28	120	27	59	952	329	12	.00	.00	.00	.00
16	11	.24	90	24	82	747	280	9.4	.00	.00	.00	.00
17	11	.20	74	25	110	588	231	8.7	.00	.00	.00	.00
18	62	.15	73	24	177	647	229	8.0	.00	.00	.00	.00
19	117	.12	65	24	208	757	239	7.4	.00	.00	.00	.00
20	72	.10	63	24	219	648	180	6.6	.00	.00	.00	.00
21	49	.08	52	27	242	660	150	5.3	.00	.00	.00	.00
22	35	.07	40	36	207	713	279	4.4	.00	.00	.00	.00
23	28	.10	44	45	166	663	500	3.6	.00	.00	.00	.00
24	22	.35	44	46	131	688	462	3.2	.00	.00	.00	.00
25	17	2.0	41	41	141	812	339	2.9	.00	.00	.00	.00
26	14	2.9	39	46	192	877	243	2.5	.00	.00	.00	.00
27	12	3.0	796	50	253	781	196	1.9	.00	.00	.00	.00
28	9.4	2.7	2890	56	336	677	186	1.4	.00	.00	.00	.00
29	8.0	2.3	1320	54	---	599	348	.98	.00	.00	.00	.00
30	6.8	1.8	660	41	---	474	422	.65	.00	.00	.00	.00
31	5.9	---	410	38	---	371	---	.49	---	.00	.00	---
TOTAL	880.40	41.09	7612.3	1924	3026	22874	14366	1316.42	2.29	.00	.00	.00
MEAN	28.4	1.37	246	62.1	108	738	479	42.5	.076	.000	.000	.000
MAX	117	4.7	2890	278	336	3540	1010	298	.39	.00	.00	.00
MIN	.00	.07	1.2	24	34	200	150	.49	.00	.00	.00	.00
AC-FT	1750	82	15100	3820	6000	45370	28490	2610	4.5	.00	.00	.00

CAL YR 1984 TOTAL 11633.91 MEAN 31.8 MAX 2890 MIN .00 AC-FT 23080
WTR YR 1985 TOTAL 52042.50 MEAN 143 MAX 3540 MIN .00 AC-FT 103200

09401200 LITTLE COLORADO RIVER AT CAMERON, AZ
(National stream-quality accounting network)

LOCATION.--Lat 35°52'40", long 111°24'40", in NE¼SE¼ sec.22, T.29 N., R.9 E. (unsurveyed), Coconino County, Hydrologic Unit 15020016, at bridge on U.S. Highway 89 at Cameron, in Navajo Indian Reservation, 2.5 mi upstream from Moenkopi Wash, 12 mi upstream from gaging station 09402000 Little Colorado River near Cameron, and 57.5 mi upstream from mouth.

DRAINAGE AREA.--24,000 mi^2, approximately.

PERIOD OF RECORD.--October 1947 to September 1970, October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1970.
WATER TEMPERATURE: October 1951 to September 1970.
SUSPENDED-SEDIMENT DISCHARGE: October 1947 to September 1970.

REMARKS.--Streamflow ungaged.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
MAR 1985												
07...	1230	668	340	8.40	14.5	9.0	2400	661	9.9	99	<1	K1000
25...	1230	E1470	473	8.40	14.5	11.0	2900	655	10.2	108	--	--
APR												
19...	1400	593	575	8.10	19.0	11.0	3800	658	9.8	103	--	K200

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
MAR 1985												
07...	38	0	11	2.6	50	4	1.6	90	74	37	33	0.3
25...	51	0	14	3.7	75	5	2.1	--	159	68	45	0.3
APR												
19...	92	0	27	5.8	78	4	2.4	273	224	65	57	0.4

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
MAR 1985												
07...	7.2	186	190	0.25	5360	0.18	0.10	3.8	0.35	0.02	0.04	0.12
25...	7.4	249	310	0.34	--	0.16	0.06	2.3	3.80	0.04	0.04	0.12
APR												
19...	8.6	310	380	0.42	--	0.17	0.05	5.7	0.96	0.06	0.04	0.12

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)
MAR 1985											
07...	170	1	39	<0.5	2	1	<3	21	90	<1	9
25...	210	1	52	<0.5	500	<1	<3	15	950	7	20
APR											
19...	100	1	97	<0.5	<1	<1	<3	6	34	6	16

E Estimated
K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09401200 LITTLE COLORADO RIVER AT CAMERON, AZ--Continued

WATER QUALITY DATA

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
MAR 1985											
07...	68	<10	6	<1	2	170	<6	60	74	8530	15400
25...	85	<10	4	<1	22	240	7	71	80	10600	--
APR											
10...	63	<10	9	<1	<1	580	7	43	84	7240	11600

< Actual value is known to be less than value shown.

09401260 MOENKOPI WASH AT MOENKOPI, AZ

LOCATION.--Lat 36°06'18", long 111°12'04", in NW¼NE¼ sec.3, T.31 N., R.11 E. (unsurveyed), Coconino County, Hydrologic Unit 15020018, in Navajo Indian Reservation on right bank 100 ft upstream from bridge on State Highway 264, 1.3 mi southeast of Moenkopi, 2.5 mi downstream from former gaging station 09401250, and 12.5 mi downstream from Begashibito Wash.

DRAINAGE AREA.--1,660 mi^2, approximately.

PERIOD OF RECORD.--July 1976 to current year. Records for October 1973 to July 1976 at site 2.5 mi upstream, not equivalent below 1.5 ft^3/s due to channel losses.

GAGE.--Water-stage recorder and crest stage gages. Elevation of gage is 4,610 ft above National Geodetic Vertical Datum of 1929, from topographic map.

AVERAGE DISCHARGE.--9 years, 10.4 ft^3/s, 7,530 acre-ft/yr.

REMARKS.--Estimated daily discharges: Oct. 1-3, 6-9, 18-30, Dec. 7 to Jan. 18, Feb. 6 to Mar. 15, Mar. 27 to Apr. 4, Apr. 27 to May 15, July 28, 29, Sept. 13-30. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft^3/s Sept. 30, 1983, gage height, 15.10 ft, from rating curve extended above 220 ft^3/s on basis of step-backwater computation at gage heights 12.2 ft, 15.0 ft, and 17.8 ft. No flow at times each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 15,100 ft^3/s occurred Aug. 4, 1929, at former gaging station site 3.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 12	0030	*520	*5.38

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.5	2.7	2.0	4.0	3.0	1.5	2.0	.24	.00	.00	.00
2	2.0	3.1	2.7	2.0	4.0	3.0	1.5	1.5	.14	.00	95	.00
3	2.0	2.7	2.3	2.0	7.4	3.0	1.8	1.5	.00	.00	5.2	.00
4	14	2.3	2.7	1.5	6.4	3.0	2.0	1.5	.20	.00	.45	.00
5	6.4	1.3	2.0	1.5	7.4	2.7	2.3	1.5	.28	.00	.10	.00
6	4.0	1.1	2.7	1.5	6.0	3.0	2.3	1.5	.28	.00	.00	.00
7	4.0	2.0	2.7	1.5	6.0	2.0	2.3	2.0	.20	.00	.00	.00
8	2.0	1.6	2.5	1.5	6.0	2.0	1.3	2.0	.10	.00	.00	.00
9	2.0	1.6	2.5	1.5	6.0	2.0	2.0	2.0	.00	.00	.00	.00
10	6.0	2.3	2.5	1.5	6.0	2.0	1.6	2.0	.00	.00	.00	.00
11	6.4	3.1	2.5	2.5	6.0	4.0	1.6	2.0	.00	.00	.00	41
12	8.0	2.0	2.5	2.5	6.0	4.0	1.6	2.0	.00	.00	.00	143
13	61	2.0	2.5	2.5	6.0	4.0	1.6	2.0	.00	.00	.00	50
14	12	2.3	2.5	2.5	5.0	3.0	1.1	1.5	.00	.00	.00	10
15	6.4	2.0	2.5	2.5	5.0	62	1.0	1.0	.00	.00	.00	2.0
16	4.8	2.0	2.5	2.5	6.0	68	1.0	.40	.00	.00	.00	2.0
17	4.8	2.0	2.5	2.5	6.0	41	1.3	.36	.00	.00	.00	2.0
18	4.0	2.0	2.5	2.5	5.0	14	4.0	.40	.00	.00	.00	2.0
19	4.0	3.5	2.5	3.0	5.0	16	6.4	.45	.00	.00	.00	15
20	4.0	3.1	2.5	4.4	4.0	16	4.0	.45	.00	.00	.00	4.0
21	3.0	2.7	2.5	4.0	4.0	14	8.0	.45	.00	.00	.00	2.0
22	3.0	2.7	2.5	3.1	3.0	14	7.4	.52	.00	.00	.00	2.0
23	3.0	2.7	2.5	5.2	3.0	9.6	4.8	.60	.00	2.2	.00	2.0
24	2.0	2.7	2.5	5.2	3.0	2.0	3.5	.60	.00	7.4	.00	1.5
25	2.0	3.1	2.5	4.4	3.0	2.0	2.3	.60	.00	.40	.00	1.5
26	2.0	4.0	2.5	4.4	3.0	1.5	2.7	.52	.00	.12	.00	1.5
27	2.0	2.7	2.5	4.4	3.0	1.5	2.5	.40	.00	.12	.00	1.5
28	2.0	3.5	2.5	5.2	3.0	1.5	2.0	.32	.00	.10	.00	1.5
29	2.0	4.0	2.5	4.4	---	1.5	2.0	.20	.00	.10	.00	1.5
30	2.7	3.1	2.5	6.0	---	1.5	2.0	.00	.00	.10	.00	1.5
31	3.1	---	2.5	12	---	1.5	---	.00	---	.00	.00	---
TOTAL	187.6	76.7	77.8	102.2	138.2	308.3	79.4	32.27	1.44	10.54	100.75	287.50
MEAN	6.05	2.56	2.51	3.30	4.94	9.95	2.65	1.04	.048	.34	3.25	9.58
MAX	61	4.0	2.7	12	7.4	68	8.0	2.0	.28	7.4	95	143
MIN	2.0	1.1	2.0	1.5	3.0	1.5	1.0	.00	.00	.00	.00	.00
AC-FT	372	152	154	203	274	612	157	64	2.9	21	200	570

CAL YR 1984 TOTAL 6512.08 MEAN 17.8 MAX 1880 MIN .00 AC-FT 12920
WTR YR 1985 TOTAL 1402.70 MEAN 3.84 MAX 143 MIN .00 AC-FT 2780

09402000 LITTLE COLORADO RIVER NEAR CAMERON, AZ

LOCATION.--Lat 35°55'35", long 111°34'00", in NW¼ sec.5, T.29 N., R.8 E. (unsurveyed), Coconino County, Hydrologic Unit 15020016, in Navajo Indian Reservation, on left bank 3 mi downstream from Coconino damsite, 9.5 mi downstream from Moenkopi Wash, 9.5 mi northwest of Cameron, and 45 mi upstream from mouth.

DRAINAGE AREA.--26,500 mi^2, approximately.

PERIOD OF RECORD.--June 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,979.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 19-25, Nov. 28 to Dec. 26, Jan. 20-28, Jan. 31 to Feb. 8, 17, July 30 to Aug. 1, and Aug. 9-23. Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 32,000 acres. Some regulation by reservoirs above station (combined capacity of principal reservoirs, about 127,000 acre-ft).

AVERAGE DISCHARGE.--38 years, 248 ft^3/s, 179,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,900 ft^3/s Jan. 21, 1952, gage height, 20.7 ft; no flow at times in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of about 120,000 ft^3/s occurred on Sept. 19 or 20, 1923, based on discharge at Grand Falls.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1000	4,870	9.24
Mar. 16	2000	*6,030	*10.22

No flow Nov. 19-22, Dec. 1-13, May 28 to July 21, Aug. 27 to Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	23	.00	4380	520	371	1370	2320	.00	.00	68	.00
2	441	18	.00	1800	410	533	1020	2550	.00	.00	740	.00
3	259	14	.00	952	310	769	799	1400	.00	.00	619	.00
4	792	11	.00	608	250	1100	752	752	.00	.00	234	.00
5	2650	8.6	.00	405	195	1220	1180	518	.00	.00	106	.00
6	2850	7.2	.00	316	150	1030	1580	405	.00	.00	429	.00
7	1040	5.2	.00	304	120	717	1580	285	.00	.00	304	.00
8	409	3.4	.00	300	110	591	1430	224	.00	.00	169	.00
9	241	2.2	.00	337	178	503	1280	202	.00	.00	135	.00
10	155	1.1	.00	234	150	474	1150	181	.00	.00	110	.00
11	104	.40	.00	208	108	441	1050	155	.00	.00	100	4.1
12	80	.20	.00	208	291	375	1030	145	.00	.00	75	151
13	69	.10	.00	205	493	1230	945	133	.00	.00	50	65
14	98	.10	80	169	308	2280	893	126	.00	.00	25	46
15	59	.10	300	150	202	3470	799	121	.00	.00	20	118
16	40	.10	250	135	166	5350	711	110	.00	.00	15	69
17	29	.10	220	123	140	4230	688	86	.00	.00	10	55
18	20	.10	200	121	376	2710	642	74	.00	.00	5.0	726
19	121	.00	175	112	630	1760	554	59	.00	.00	3.0	503
20	211	.00	200	106	775	1980	474	49	.00	.00	2.0	80
21	148	.00	240	100	893	2110	396	37	.00	.00	1.0	927
22	110	.00	200	96	818	1950	400	32	.00	12	.50	1440
23	82	3.1	170	92	734	1590	308	25	.00	27	.05	416
24	100	2.4	150	88	781	1550	262	14	.00	224	.03	158
25	98	1.6	135	85	728	1470	224	7.1	.00	258	.02	72
26	67	1.2	125	81	653	1300	668	2.8	.00	114	.01	45
27	51	.70	138	76	483	1360	894	.30	.00	69	.00	30
28	49	.40	153	76	375	1460	670	.00	.00	50	.00	20
29	44	.20	422	357	---	1390	450	.00	.00	119	.00	15
30	35	.10	2640	861	---	1260	633	.00	.00	90	.00	12
31	29	---	3770	660	---	1310	---	.00	---	50	.00	---
TOTAL	11801	104.60	9568.00	13745	11347	47884	24832	10013.20	.00	1013.00	3220.61	4952.10
MEAN	381	3.49	309	443	405	1545	828	323	.000	32.7	104	165
MAX	2850	23	3770	4380	893	5350	1580	2550	.00	258	740	1440
MIN	20	.00	.00	76	108	371	224	.00	.00	.00	.00	.00
AC-FT	23410	207	18980	27260	22510	94980	49250	19860	.00	2010	6390	9820

CAL YR 1984 TOTAL 98884.30 MEAN 270 MAX 5610 MIN .00 AC-FT 196100
WTR YR 1985 TOTAL 138480.51 MEAN 379 MAX 5350 MIN .00 AC-FT 274700

09402500 COLORADO RIVER NEAR GRAND CANYON, AZ

LOCATION.--Lat 36°06'05", long 112°05'08", in sec.5, T.31 N., R.3 E. (unsurveyed), Coconino County, Hydrologic Unit 15010001, in Grand Canyon National Park, on left bank 0.2 mi upstream from Kaibab Bridge, 0.4 mi upstream from Bright Angel Creek, 4.5 mi northeast of village of Grand Canyon, 26 mi downstream from Little Colorado River, and 267 mi upstream from Hoover Dam.

DRAINAGE AREA.--141,600 mi^2 approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1922 to current year. Prior to 1944, published as "Colorado River at Bright Angel Creek, near Grand Canyon." Gage-height records collected 1.5 mi downstream 1908-13, published in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder with supplementary water-stage recorder on right bank 700 ft downstream (prior to Oct. 1, 1934, supplementary gage was the only gage). Datum of both gages is 2,418.7 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Lake Powell, 104 mi upstream, since Mar. 13, 1963. (See elsewhere in this report.) Many diversions above station for irrigation, municipal, and industrial uses.

AVERAGE DISCHARGE (unadjusted for storage in Lake Powell).--40 years (water years 1923-62), 16,930 ft^3/s, 12,260,000 acre-ft/yr; 21 years (water years 1965-85) 14,690 ft^3/s, 10,643,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1922-62: Maximum discharge, 127,000 ft^3/s July 2, 1927, gage height, 29.25 ft; minimum, 700 ft^3/s Dec. 28, 1924, gage height, -0.70 ft.
1963-85: Maximum discharge, 96,200 ft^3/s June 29, 1983, gage height, 26.26 ft; minimum, 850 ft^3/s Jan. 26, 1963, gage height, -0.55 ft, result of closing coffer dam at Glen Canyon Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1884, 300,000 ft^3/s about July 8, 1884 (computed on basis of flood studies at Lees Ferry). Crest discharge of flood of June 19, 1921, was 220,000 ft^3/s, gage height, 37.5 ft from floodmarks, from rating curve extended above 120,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 47,400 ft^3/s June 2, gage height, 18.25 ft; minimum daily, 5,810 ft^3/s Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26900	24700	24000	29200	26100	27200	17600	22200	45300	29900	28100	28800
2	24400	25200	24400	28000	28800	27100	18200	22100	46000	30000	28700	28200
3	24200	25100	24900	26600	29200	26500	18600	21600	46700	30400	27400	26600
4	24500	25100	23100	26300	29900	27800	19800	24400	46400	30000	26700	26200
5	25600	25100	22900	26000	26400	28100	21300	26800	45400	30100	26800	28400
6	27000	25100	23600	25900	26100	27900	21500	26400	40300	30100	28200	26000
7	26200	25000	22300	25800	26400	27800	22000	26400	35100	29900	26700	23300
8	25000	25000	22700	25900	26600	25400	21500	26400	31000	29800	27200	23400
9	23900	25000	25000	25900	26500	22100	23200	26100	30300	29800	25900	23000
10	21400	24600	25200	25600	26700	20500	22000	26300	30100	29300	25300	24600
11	24100	24900	24500	25800	26600	19600	21400	26400	30200	29300	26900	24400
12	24400	25100	25300	25700	26600	20200	21000	26100	30100	29500	25200	22400
13	24000	24900	25200	25800	26800	19200	21600	26000	34200	26300	27500	22800
14	24100	25200	25200	25800	26800	22300	20700	26200	39600	24300	27200	23600
15	24100	25200	25300	25800	26800	23500	21100	25800	44700	27800	26500	22700
16	24200	25100	25400	25700	26800	25000	21800	25500	45300	29900	26600	22100
17	23500	25200	25700	25700	27000	23700	23100	24600	44500	28700	26100	24600
18	24200	25100	24400	24300	27100	19600	14000	43500	46100	28100	25100	23500
19	19300	25200	24800	25000	27300	20000	18400	44600	45800	28900	25400	22200
20	7180	25000	24500	25700	27600	18000	23800	43800	45800	27000	26900	23000
21	5940	25200	24300	25700	27800	20800	23100	43400	46200	27800	23700	23000
22	5810	25000	25300	25100	27800	17700	23800	44100	46100	26700	24000	22100
23	15600	25000	25500	25500	27400	18400	21900	43500	45400	26300	24200	24000
24	24900	24800	25600	25000	27500	17500	18900	44200	45900	26700	25000	22100
25	24500	24700	25600	25700	27600	17500	20200	43200	45200	24300	23900	22100
26	25100	24400	25500	24700	27600	20800	22600	43400	39300	27100	25300	22400
27	25100	24800	24900	25800	27200	19700	22000	43500	36100	27200	25000	22400
28	25000	25000	25700	25900	27300	18800	23300	45100	35300	28500	25200	20800
29	24900	24600	25400	25800	---	17900	21500	45600	30900	28500	25000	21200
30	24900	24600	26600	26200	---	18900	20800	45900	30000	26900	27800	19400
31	25100	---	28400	26200	---	18900	---	45600	---	27800	27900	---
TOTAL	695030	748900	771200	802100	762300	678400	630700	1048700	1203300	876900	811400	709300
MEAN	22420	24960	24880	25870	27220	21880	21020	33830	40110	28290	26170	23640
MAX	27000	25200	28400	29200	29900	28100	23800	45900	46700	30400	28700	28800
MIN	5810	24400	22300	24300	26100	17500	14000	21600	30000	24300	23700	19400
AC-FT	1379000	1485000	1530000	1591000	1512000	1346000	1251000	2080000	2387000	1739000	1609000	1407000

CAL YR 1984 TOTAL 10386930 MEAN 28380 MAX 44600 MIN 5810 AC-FT 20600000
WTR YR 1985 TOTAL 9738230 MEAN 26680 MAX 46700 MIN 5810 AC-FT 19320000

09402500 COLORADO RIVER NEAR GRAND CANYON, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1925 to November 1942, September 1943 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to March 1974, April 1983 to current year.
WATER TEMPERATURES: October 1940 to October 1942, September 1943 to September 1976, April 1983 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1925 to November 1942, September 1943 to September 1972.

INSTRUMENTATION.--Water-temperature recorder from October 1952 to September 1976. Specific conductance and water temperature recorder April 1983 to current year.

REMARKS.--Unpublished chemical analyses for period October 1930 to September 1940, daily specific conductance measurements for period October 1937 to November 1942, September 1943 to September 1964, and daily water temperatures for period October 1936 to September 1940, available from district office in Tucson, Ariz.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (April 1983 to current year): Maximum recorded, 1,030 microsiemens on Mar. 30, 1984; minimum recorded, 699 microsiemens Dec. 12, 13, 1984.
WATER TEMPERATURE (April 1983 to current year): Maximum recorded, 16.0°C on Aug. 26, 1984; minimum recorded, 7.5°C on Mar. 5, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 873 microsiemens on May 1; minimum recorded, 632 microsiemens on July 18.
WATER TEMPERATURE: Maximum recorded, 13.5°C on Oct. 28; minimum recorded, 7.5°C on Mar. 5.

WATER QUALITY DATA

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
FEB 1985											
07...	1545	26500	733	8.20	--	8.0	708	11.9	--	240	120
MAY											
01...	1250	26500	780	8.30	32.0	10.0	703	10.7	E103	250	120
JUL											
31...	1545	27900	675	8.30	--	12.5	700	9.9	101	240	120
SEP											
05...	1315	26900	735	--	30.0	11.5	700	9.8	98	230	110

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)
FEB 1985										
07...	61	22	62	2	3.0	--	126	180	44	0.3
MAY										
01...	64	22	64	2	3.2	162	132	180	52	0.3
JUL										
31...	60	21	59	2	3.5	148	121	180	44	0.2
SEP										
05...	58	21	59	2	2.9	148	121	170	43	0.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	BORON, DISSOLVED (UG/L AS B) (01020)	IRON, DISSOLVED (UG/L AS FE) (01046)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
FEB 1985										
07...	9.0	439	460	0.6	0.37	<0.01	210	10	293	21000
MAY										
01...	8.8	508	470	0.69	0.40	<0.01	80	15	--	--
JUL										
31...	9.3	485	450	0.66	0.36	<0.01	40	7	888	66900
SEP										
05...	24	452	450	0.61	0.38	<0.01	70	5	--	--

E Estimated
< Actual value is known to be less than value shown.

09402500 COLORADO RIVER NEAR GRAND CANYON, AZ--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	714	708	---	---	---	---	---	---	---
2	---	---	---	712	706	---	---	---	---	---	---	---
3	---	---	---	709	706	---	---	---	---	---	---	---
4	---	---	---	706	703	---	---	---	---	---	---	---
5	---	---	---	708	705	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	789	714	---	---	---	---	---	---	---	---	---	---
24	717	711	---	---	---	---	---	---	---	---	---	---
25	720	711	---	---	---	---	---	---	---	---	---	---
26	718	706	---	---	---	---	---	---	---	---	---	---
27	714	708	---	---	---	---	---	---	---	---	---	---
28	712	709	---	---	---	---	---	---	---	---	---	---
29	714	709	---	---	---	---	---	---	---	---	---	---
30	712	709	---	---	---	---	---	---	---	---	---	---
31	714	706	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	742	733	---	807	792	---	873	811	829
2	---	---	---	756	742	---	817	796	---	846	825	833
3	---	---	---	753	739	---	823	793	---	853	815	830
4	---	---	---	801	742	---	823	798	---	843	816	827
5	---	---	---	804	762	---	819	795	---	818	809	814
6	717	712	---	759	739	---	822	798	---	817	806	813
7	733	700	---	760	741	---	---	---	---	814	802	807
8	711	703	---	804	762	---	---	---	---	815	807	810
9	714	702	---	789	774	---	---	---	---	812	803	808
10	717	700	---	787	769	---	---	---	---	810	798	803
11	733	703	---	789	780	---	---	---	---	810	798	805
12	723	705	---	790	781	---	---	---	---	806	781	800
13	754	709	---	792	780	---	---	---	---	808	778	796
14	721	718	---	862	787	---	---	---	---	807	791	801
15	717	708	---	786	730	---	---	---	---	788	776	781
16	718	708	---	742	690	---	---	---	---	788	778	783
17	717	709	---	744	730	---	---	---	---	790	777	783
18	724	714	---	762	741	---	---	---	---	779	767	771
19	738	724	---	769	745	---	---	---	---	769	763	766
20	742	729	---	801	772	---	---	---	---	766	756	761
21	742	732	---	793	783	---	---	---	---	765	755	758
22	742	733	---	802	786	---	---	---	---	758	746	752
23	745	733	---	814	789	---	---	---	---	763	741	754
24	753	739	---	828	---	---	---	---	---	758	744	749
25	751	720	---	828	786	---	---	---	---	757	743	750
26	739	726	---	831	783	---	---	---	---	751	744	749
27	738	733	---	810	790	---	---	---	---	746	737	743
28	736	730	---	834	798	---	---	---	---	742	733	738
29	---	---	---	843	811	---	---	---	---	744	733	740
30	---	---	---	826	814	---	---	---	---	744	734	737
31	---	---	---	820	804	---	---	---	---	738	716	725
MONTH	---	---	---	862	---	---	---	---	---	873	716	781

09402500 COLORADO RIVER NEAR GRAND CANYON, AZ--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	748	721	733	675	667	671	653	643	647	692	669	683
2	733	712	725	678	666	673	757	644	663	692	683	687
3	725	714	719	671	667	669	704	662	677	699	686	692
4	725	718	721	672	666	668	683	665	675	702	689	696
5	721	717	719	669	665	668	668	654	659	691	685	688
6	731	717	725	667	664	665	666	660	662	---	---	---
7	719	710	715	669	663	666	716	663	675	---	---	---
8	724	714	720	666	662	665	671	657	662	---	---	---
9	719	708	714	668	656	661	669	663	666	---	---	---
10	718	710	714	669	657	663	672	664	667	---	---	---
11	714	702	709	662	657	659	678	657	668	---	---	---
12	705	701	703	664	655	659	676	666	670	---	---	---
13	701	691	696	663	654	659	673	658	667	---	---	---
14	699	693	697	686	653	664	679	661	667	---	---	---
15	701	692	695	694	650	662	673	668	670	---	---	---
16	699	692	696	663	648	653	674	667	669	---	---	---
17	700	694	696	658	649	654	679	668	672	---	---	---
18	697	690	693	696	632	655	678	668	673	---	---	---
19	695	687	691	673	644	655	681	671	675	---	---	---
20	694	683	690	670	651	661	678	666	672	---	---	---
21	691	682	688	672	648	659	684	678	681	---	---	---
22	693	680	686	658	646	652	687	677	682	---	---	---
23	692	679	683	709	649	666	694	675	684	---	---	---
24	696	681	688	704	653	669	696	675	683	---	---	---
25	687	671	678	688	662	675	696	682	687	---	---	---
26	698	673	688	682	651	658	697	681	687	---	---	---
27	696	670	680	650	645	647	685	677	680	---	---	---
28	695	671	679	647	640	643	688	682	685	---	---	---
29	689	674	683	648	642	644	739	688	703	---	---	---
30	681	672	674	660	638	649	725	682	696	---	---	---
31	---	---	---	655	640	646	692	683	687	---	---	---
MONTH	748	670	700	709	632	660	757	643	675	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---		13.0	12.5							
2	---	---		13.0	12.0							
3	---	---		13.0	12.0							
4	---	---		13.0	12.5							
5	---	---		13.0	12.5							
6	---	---		---	---							
7	---	---		---	---							
8	---	---		---	---							
9	---	---		---	---							
10	---	---		---	---							
11	---	---		---	---							
12	---	---		---	---							
13	---	---		---	---							
14	---	---		---	---							
15	---	---		---	---							
16	---	---		---	---							
17	---	---		---	---							
18	---	---		---	---							
19	---	---		---	---							
20	---	---		---	---							
21	---	---		---	---							
22	---	---		---	---							
23	12.5	12.5		---	---							
24	13.0	12.0		---	---							
25	13.0	12.5		---	---							
26	13.0	12.5		---	---							
27	13.0	12.0		---	---							
28	13.5	12.5		---	---							
29	13.0	12.5		---	---							
30	13.0	12.5		---	---							
31	13.0	12.5		---	---							
MONTH	---	---		---	---							

09402500 COLORADO RIVER NEAR GRAND CANYON, AZ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---		9.5	8.5		9.5	9.0	---	11.0	9.5	10.5
2	---	---		9.5	8.5		10.0	9.5	---	11.5	10.0	11.0
3	---	---		9.0	8.5		10.0	9.5	---	12.0	10.5	11.0
4	---	---		8.5	8.0		10.5	9.5	---	12.0	10.0	11.0
5	---	---		9.0	7.5		10.0	9.5	---	10.5	9.0	9.5
6	9.0	8.5		9.0	8.0		10.5	9.5	---	10.5	9.0	9.5
7	9.0	8.0		9.5	8.5		10.5	9.5	---	10.5	9.5	10.0
8	9.0	8.5		9.0	8.0		11.0	9.5	---	10.0	9.0	9.5
9	9.0	8.5		9.5	8.5		11.0	9.5	---	10.0	9.0	9.5
10	9.0	8.5		9.5	9.0		10.5	9.5	---	10.0	9.0	9.5
11	9.0	8.5		10.0	9.5		10.5	9.5	---	10.0	8.5	9.5
12	9.0	8.0		9.5	9.0		10.5	9.5	---	10.0	8.5	9.0
13	9.0	8.5		9.5	9.0		10.5	9.5	---	10.0	8.5	9.0
14	9.5	8.5		9.5	8.5		10.5	10.0	---	10.5	8.5	9.0
15	9.5	8.5		9.5	9.0		10.5	9.5	---	10.5	9.0	10.0
16	9.5	8.5		9.5	9.0		10.5	9.5	---	11.0	9.0	10.0
17	9.5	8.5		9.5	9.0		10.5	9.5	---	11.0	9.5	10.0
18	9.5	8.5		10.0	9.0		10.0	10.0	---	10.5	9.0	9.5
19	9.5	9.0		10.0	9.0		10.5	9.5	---	9.5	8.5	9.0
20	9.0	8.5		10.0	9.5		9.5	9.0	---	9.5	8.5	9.0
21	9.0	9.0		10.0	9.5		9.5	8.5	---	9.5	9.0	9.0
22	9.5	8.5		10.0	9.0		9.5	8.5	---	9.5	8.5	9.0
23	9.0	8.5		9.5	9.0		9.5	9.0	---	9.5	9.0	9.5
24	9.0	8.5		10.0	9.0		10.0	9.0	---	10.0	9.0	9.5
25	9.5	8.5		10.0	9.5		10.5	9.5	---	10.0	9.0	9.5
26	9.5	8.5		10.0	9.5		9.5	8.5	---	10.0	9.0	9.5
27	9.5	8.5		10.0	9.0		9.0	8.0	---	10.0	9.0	9.5
28	9.5	8.5		9.5	9.0		9.0	8.5	---	10.5	9.0	9.5
29	---	---		9.5	8.5		10.0	8.5	---	10.0	9.0	9.5
30	---	---		8.5	8.0		10.5	10.0	10.5	10.0	9.0	9.5
31	---	---		9.0	8.0		---	---	---	10.5	8.5	9.5
MONTH	---	---		10.0	7.5		11.0	8.0	---	12.0	8.5	9.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.0	9.0	9.5	11.5	10.5	11.0	12.5	10.5	11.5	12.5	11.0	11.5
2	10.0	9.5	9.5	12.0	10.0	11.0	12.5	11.0	11.5	12.0	11.0	11.5
3	10.0	9.0	9.5	12.0	10.5	11.5	12.5	11.5	12.0	12.0	11.0	11.5
4	10.0	9.0	9.5	12.0	10.5	11.5	12.0	11.0	11.5	12.0	11.0	11.5
5	10.0	9.0	9.5	12.0	10.5	11.5	12.0	11.0	11.5	12.0	11.0	11.5
6	10.5	9.0	9.5	12.0	10.5	11.5	12.0	10.5	11.5	---	---	---
7	11.0	9.5	10.0	11.5	10.5	11.0	12.5	11.0	11.5	---	---	---
8	11.5	10.0	10.5	12.0	10.5	11.0	12.5	11.5	12.0	---	---	---
9	11.5	10.0	10.5	12.0	10.5	11.5	12.5	11.5	12.0	---	---	---
10	11.5	10.0	10.5	12.0	10.5	11.5	12.5	11.0	11.5	---	---	---
11	11.5	10.0	10.5	12.0	11.0	11.5	12.5	11.0	12.0	---	---	---
12	11.5	10.0	10.5	12.0	10.5	11.5	12.5	11.0	12.0	---	---	---
13	11.5	10.0	10.5	12.0	10.5	11.5	12.5	11.0	11.5	---	---	---
14	11.0	10.0	10.5	12.0	11.0	11.5	12.0	10.5	11.5	---	---	---
15	11.0	9.5	10.0	12.0	11.0	11.5	12.0	10.5	11.5	---	---	---
16	10.5	9.5	10.0	11.5	11.0	11.5	12.0	11.0	11.5	---	---	---
17	10.5	9.5	10.0	12.0	10.5	11.5	12.0	11.0	11.5	---	---	---
18	10.5	9.5	10.0	12.0	10.5	11.5	12.0	11.0	11.5	---	---	---
19	10.5	9.5	10.0	12.0	10.5	11.5	12.5	11.0	11.5	---	---	---
20	11.0	9.5	10.0	12.0	10.5	11.0	12.0	11.5	11.5	---	---	---
21	11.0	9.5	10.0	12.0	10.5	11.0	12.0	11.0	11.5	---	---	---
22	11.0	9.5	10.0	12.0	10.5	11.5	12.5	11.5	12.0	---	---	---
23	10.5	10.0	10.0	12.0	11.0	11.5	12.0	11.5	11.5	---	---	---
24	10.5	9.5	10.0	12.0	10.5	11.5	12.5	11.0	11.5	---	---	---
25	10.5	9.5	10.0	12.0	11.0	11.5	12.0	11.0	11.5	---	---	---
26	10.5	9.5	10.0	12.0	11.0	11.5	12.0	11.0	11.5	---	---	---
27	11.0	10.0	10.5	12.0	11.0	11.5	12.5	11.0	12.0	---	---	---
28	11.5	9.5	10.5	12.0	11.0	11.5	12.5	11.5	12.0	---	---	---
29	11.5	10.0	10.5	11.5	10.5	11.0	12.5	11.5	12.0	---	---	---
30	12.0	10.5	11.0	12.5	11.0	11.5	12.5	11.0	12.0	---	---	---
31	---	---	---	12.5	11.0	11.5	12.0	11.0	11.5	---	---	---
MONTH	12.0	9.0	10.0	12.5	10.0	11.5	12.5	10.5	11.5	---	---	---
YEAR	13.5	7.5										

09403600 KANAB CREEK NEAR KANAB, UT

LOCATION.--Lat 37°06'02", long 112°32'50", in NE¼NE¼SW¼ sec.5, T.43 S., R.6 W., Kane County, Hydrologic Unit 15010003, at upstream edge of left bridge pier on U.S. Highway 89, 300 ft upstream from Tiny Canyon and 3.5 mi north of Kanab.

DRAINAGE AREA.--198 mi^2.

PERIOD OF RECORD.--July 1959 to September 1968 (annual maximum only). January 1979 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,060 ft above National Geodetic Vertical Datum of 1929, from topographic map. A crest-stage gage was in operation at this site from July 22, 1959 to Sept. 30, 1968, at different datum.

REMARKS.--Estimated daily discharges: Oct. 1-3, Nov. 27 to Dec. 10, Dec. 16 to Jan. 7, Jan. 13 to Feb. 11, Mar. 12, 13, 19, 20, Mar. 27 to Apr. 3, June 28 to July 3, 5, and Aug. 20. Records poor. No diversion above station for irrigation.

AVERAGE DISCHARGE.--6 years, 17.4 ft^3/s, 12,610 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130 ft^3/s Aug. 20, 1984, gage height, 8.50 ft; minimum recorded, 0.90 ft^3/s June 23, 26, 29, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge recorded by crest-stage gage, 3,030 ft^3/s Sept. 8, 1961, gage height, 19.80 ft at different datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 19	2130	*376	*5.80

Minimum daily discharge, 3.0 ft^3/s Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	8.7	11	11	12	14	65	12	9.4	7.8	8.0	10
2	9.0	7.6	14	11	12	13	43	12	9.2	7.8	7.7	8.5
3	8.9	8.8	13	11	13	14	38	11	8.9	7.6	6.6	8.5
4	8.8	7.5	13	12	13	16	37	11	7.7	7.3	6.9	9.7
5	8.8	7.8	12	13	14	16	34	10	7.7	6.6	6.8	8.4
6	8.4	8.7	12	14	14	17	34	9.1	7.6	6.5	7.4	8.5
7	6.5	8.9	12	18	14	18	34	8.1	7.2	6.3	8.1	8.1
8	9.1	9.0	12	19	15	40	33	8.2	6.6	6.6	9.3	9.1
9	6.4	12	12	21	16	41	34	8.2	6.2	6.3	9.3	8.6
10	8.0	16	12	19	15	35	35	7.9	6.1	7.0	9.2	9.5
11	7.5	14	13	19	16	29	33	7.1	6.1	7.3	9.5	9.5
12	9.5	13	13	15	17	29	30	7.2	5.6	7.7	10	10
13	8.8	14	12	15	16	29	30	7.5	6.0	7.7	9.1	8.6
14	8.7	12	13	15	14	30	28	8.4	6.0	7.3	9.6	8.6
15	9.0	13	13	15	14	33	28	9.1	6.0	7.7	9.1	7.9
16	8.8	12	11	16	14	33	26	7.9	5.8	8.0	8.5	9.2
17	9.9	13	9.0	16	14	33	27	9.0	6.0	7.7	8.7	8.3
18	9.6	15	12	16	14	33	26	9.5	6.3	8.4	9.7	9.8
19	11	13	12	16	14	50	27	9.3	5.9	14	9.9	10
20	10	18	12	16	14	30	27	7.6	5.8	8.4	10	10
21	7.5	12	12	17	12	29	29	7.4	7.0	8.0	9.8	11
22	10	14	11	17	13	31	24	8.0	6.9	8.0	9.7	10
23	9.2	14	10	17	12	31	24	7.7	6.3	7.7	10	9.9
24	9.3	14	11	17	13	31	20	8.1	6.0	8.0	9.8	9.0
25	7.7	14	12	17	12	31	17	8.5	5.4	8.0	8.9	8.5
26	7.0	14	14	17	12	33	15	8.6	5.5	8.0	9.4	9.6
27	6.5	14	12	17	16	35	14	8.2	7.1	8.0	9.3	9.6
28	9.0	13	12	17	16	50	15	8.3	7.2	8.0	9.2	8.0
29	9.0	12	11	16	---	46	13	8.5	7.4	8.0	9.8	7.8
30	7.1	11	11	15	---	45	12	8.8	7.6	7.7	9.1	8.0
31	10	---	11	14	---	60	---	8.7	---	7.7	9.7	---
TOTAL	268.0	364.0	370.0	487	391	975	852	270.9	202.5	241.1	278.1	272.2
MEAN	8.65	12.1	11.9	15.7	14.0	31.5	28.4	8.74	6.75	7.78	8.97	9.07
MAX	11	18	14	21	17	60	65	12	9.4	14	10	11
MIN	6.4	7.5	9.0	11	12	13	12	7.1	5.4	6.3	6.6	7.8
AC-FT	532	722	734	966	776	1930	1690	537	402	478	552	540

CAL YR 1984 TOTAL 4554.6 MEAN 12.4 MAX 100 MIN 3.6 AC-FT 9030
WTR YR 1985 TOTAL 4971.8 MEAN 13.6 MAX 65 MIN 5.4 AC-FT 9860

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ

LOCATION.--Lat 36°53'30", long 113°55'25", in SW¼SW¼ sec.4, T.40 N., R.15 W., Mohave County, Hydrologic Unit 15010010, on right bank 0.5 mi downstream from Beaver Dam Wash, 0.4 mi upstream from Littlefield, and 36 mi upstream from waterline of Lake Mead at altitude 1,221 ft, National Geodetic Vertical Datum of 1929.

DRAINAGE AREA.--5,090 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 959: 1932. WSP 979: 1930-31, 1933-37. WSP 1313: 1940(M).

GAGE.--Water-stage recorder. Datum of gage is 1,763.68 ft above National Geodetic Vertical Datum of 1929. Prior to May 28, 1933, nonrecording gage at site 300 ft, upstream and May 28, 1933, to Nov. 7, 1939, at same site, both at datum 2.53 ft higher. Nov. 8, 1939, to Mar. 31, 1942, nonrecording gage at same site at datum 2.00 ft higher. Apr. 1, 1942, to Sept. 30, 1970, water-stage recorder at same site at same datum. Oct. 1, 1970, to Aug. 7, 1979, at site 300 ft upstream at same datum.

REMARKS.--Estimated daily discharges: June 27 to July 29, Aug. 1-8, and Aug. 24, 27. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--56 years, 243 ft^3/s, 176,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,200 ft^3/s Dec. 6, 1966, gage height, 15.66 ft, for site then in use, from rating curve extended above 1,500 ft^3/s on basis of slope-area measurement of peak flow; minimum, 38 ft^3/s May 1, 10, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 11	2000	*1,260	*6.54

Minimum daily, 66 ft^3/s, July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	216	233	302	252	272	362	388	150	70	91	68
2	116	205	237	288	265	275	396	411	129	72	92	70
3	129	199	233	278	272	278	467	442	96	78	82	70
4	129	205	226	288	275	272	547	454	89	82	74	70
5	134	209	230	288	272	292	551	521	94	78	73	74
6	134	205	226	288	272	326	604	500	87	73	72	78
7	134	209	230	288	265	337	686	564	89	74	80	76
8	124	205	237	388	275	333	748	487	83	76	83	83
9	121	209	260	369	288	337	777	502	74	70	76	85
10	114	216	264	309	292	337	828	402	74	72	74	79
11	121	216	267	292	288	472	936	438	74	92	70	83
12	316	219	292	288	285	388	835	377	122	78	74	83
13	321	223	279	285	288	358	835	340	94	72	72	85
14	216	219	271	272	288	309	858	309	81	66	72	83
15	199	219	241	272	288	309	820	333	81	70	74	83
16	202	223	271	272	288	322	813	344	81	68	70	85
17	202	226	264	272	288	337	770	380	76	72	78	87
18	209	230	252	272	288	358	734	377	71	96	85	96
19	202	230	264	272	292	499	791	358	67	90	78	131
20	209	226	321	278	292	500	755	347	67	100	78	144
21	219	212	308	275	326	392	557	340	67	250	81	100
22	212	212	267	275	305	362	521	333	67	140	85	98
23	212	230	260	275	295	344	467	304	67	74	85	96
24	205	260	252	278	278	344	399	308	68	70	80	102
25	205	275	260	278	272	358	380	288	81	82	75	107
26	209	271	264	278	272	358	369	186	100	76	70	121
27	212	233	292	282	265	362	355	196	90	72	67	91
28	209	230	470	282	265	467	358	139	80	74	76	91
29	205	241	411	282	---	564	380	98	75	151	67	100
30	212	237	333	278	---	380	369	104	72	186	67	98
31	212	---	305	272	---	347	---	107	---	114	68	---
TOTAL	5746	6710	8520	8916	7891	11189	18268	10677	2546	2838	2369	2717
MEAN	185	224	275	288	282	361	609	344	84.9	91.5	76.4	90.6
MAX	321	275	470	388	326	564	936	564	150	250	92	144
MIN	102	199	226	272	252	272	355	98	67	66	67	68
AC-FT	11400	13310	16900	17680	15650	22190	36230	21180	5050	5630	4700	5390

CAL YR 1984 TOTAL 85989 MEAN 235 MAX 2150 MIN 66 AC-FT 170600
WTR YR 1985 TOTAL 88387 MEAN 242 MAX 936 MIN 66 AC-FT 175300

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1947 to current year.
CHEMICAL ANALYSES: July 1949 to September 1969, once daily (composited); October 1969 to current year, monthly.
SPECIFIC CONDUCTANCES AND WATER TEMPERATURES: October 1947 to current year, once daily.
BIOLOGICAL DATA: October 1977 to September 1979, twice yearly.
MICROBIOLOGICAL DATA: November 1977 to October 1979, monthly.
SEDIMENT DATA: October 1947 to September 1968, once daily; September 1977 to November 1979, monthly.

REMARKS.--Streamflow is not completely homogenous chemically from bank to bank. Flow adjacent to north bank is generally somewhat more dilute than average; monthly data collected during June 1975 to September 1976 indicate that specific conductance off north bank was 93 to 100 percent of stream-wide average (range of discharge, 60-230 ft^3/s). This doubtless affects specific conductance of daily samples, which are collected off north bank. Water temperature characteristically shows little or no variation from bank to bank. Much of day-to-day fluctuation in water temperature prior to August 1975 was due to measurement at different times of day (rather than at about the same time each day). Detailed sampling information for period since June 1975 is available from U.S. Geological Survey, Carson City, Nev. No daily samples were collected from October 1983 to March 1984.

EXTREMES MEASURED FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCES: Maximum, 4,650 microsiemens Aug. 21, 1966; minimum, 615 microsiemens May 27, 28, 30, 31, 1983.
FECAL STREPTOCOCCI: Maximum, 46,000 colonies/100 mL (non-ideal colony count) Jan. 25, 1978; minimum, 110 colonies/100 mL Aug. 28, 1979.
WATER TEMPERATURES: Maximum, 33.5°C July 7, 1953; minimum, 2.0°C Jan. 4, 1949, Jan. 4, 1950, Jan. 4, 5, 1971.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 247,000 mg/L Aug. 14, 1964; minimum, 40 mg/L June 16, 20, 1962.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE DAILY).--
SPECIFIC CONDUCTANCES: Maximum, 3,540 microsiemens Sept. 25; minimum, 978 microsiemens Apr. 12-14.
WATER TEMPERATURES: Maximum 30.5°C July 8; minimum, 6.5°C Jan. 31.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT 1984												
25...	1245	193	2600	7.90	16.0	15.5	719	9.1	98	1000	800	270
NOV												
30...	1015	237	2600	8.00	15.0	10.5	719	10.0	96	920	640	250
DEC												
24...	1230	254	2500	7.90	11.0	10.0	720	10.3	97	870	560	230
JAN 1985												
25...	1200	286	2450	8.00	11.0	12.5	722	10.4	104	840	500	220
FEB												
25...	1215	275	2400	7.60	16.0	14.0	718	9.4	98	870	550	230
MAR												
28...	1130	489	2080	7.90	17.0	12.5	707	8.7	89	710	540	190
APR												
25...	1145	372	1900	7.90	21.0	17.5	706	8.6	98	630	340	170
MAY												
29...	1200	92	3400	8.00	32.0	24.5	709	9.1	119	1200	1100	330
JUN												
25...	1200	66	3300	7.80	29.5	26.0	710	7.4	99	1300	1000	330
JUL												
29...	1130	75	3530	7.90	36.5	25.0	714	7.8	102	1200	960	300
AUG												
27...	1100	69	3380	7.80	40.0	26.5	718	8.2	110	1300	1000	350
SEP												
26...	1200	111	3550	7.90	34.0	23.0	715	8.0	101	1300	1100	350

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

WATER QUALITY DATA

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)
OCT 1984 25...	78	230	3	23	750	330	0.8	18	1820	1800	2.5	0.79
NOV 30...	72	240	4	20	710	340	0.7	20	1690	1800	2.3	--
DEC 24...	71	230	4	18	680	310	0.7	20	1780	1700	2.4	--
JAN 1985 25...	70	230	4	18	590	300	0.7	18	1740	1600	2.4	0.87
FEB 25...	71	220	3	18	630	290	0.5	18	1680	1700	2.3	--
MAR 28...	56	180	3	15	510	250	0.6	16	1340	1300	1.8	--
APR 25...	49	150	3	15	450	210	0.5	14	1280	1200	1.7	0.49
MAY 29...	100	290	4	31	1100	470	0.9	19	2510	2400	3.4	--
JUN 25...	110	270	3	28	1100	400	1.0	20	2530	2400	3.4	--
JUL 29...	110	310	4	29	1000	370	0.9	19	2630	2300	3.6	--
AUG 27...	100	270	3	28	1100	380	0.9	18	2540	2400	3.5	--
SEP 26...	110	360	4	33	1100	520	0.9	19	2670	2600	3.6	--

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)
OCT 1984 25...	0.01	0.80	0.09	0.12	0.51	0.38	0.6	0.5	1.4	6.2	0.41	0.04
NOV 30...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 24...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1985 25...	0.03	0.90	0.25	0.26	1.0	0.24	1.3	0.5	2.2	9.7	0.51	0.06
FEB 25...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 28...	--	--	--	--	--	--	--	--	--	--	--	--
APR 25...	0.01	0.50	0.09	0.10	0.71	0.5	0.8	0.6	1.3	5.8	0.36	0.05
MAY 29.	--	--	--	--	--	--	--	--	--	--	--	--
JUN 25...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	<0.01	0.40	0.14	0.21	0.46	0.09	0.6	0.3	1.0	4.4	0.04	<0.01
AUG 27...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 26...	--	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3220	2770	2590	2350	2720	2320	2020	1710	3020	3220	3210	3220
2	3220	2770	2610	2440	2820	2200	1940	1710	3000	3290	3250	3320
3	3120	2850	2610	2560	2740	2200	1750	1630	3160	3180	3210	3320
4	3040	2850	2610	2520	---	2040	1570	1590	3160	3390	3210	3170
5	2910	2770	2630	2520	---	2320	1530	1750	3320	3330	3250	3430
6	2950	2810	2630	2520	---	2430	1430	1870	3360	3390	3140	3320
7	2910	2810	2650	2100	2500	2360	1320	1530	3360	3390	3470	3320
8	3000	2850	2650	2100	2500	2490	1200	1870	3260	3220	3420	3320
9	3000	2850	2380	2310	2500	2490	1180	1870	3180	3330	3250	3320
10	3080	2810	2380	2310	2420	2530	1160	2160	3120	3220	3320	3320
11	---	2750	2380	2420	2420	1630	1020	2020	---	3180	3320	3430
12	3430	2850	2270	2420	2500	2000	978	2730	3160	---	3320	3390
13	2120	2850	2230	2480	2460	2000	978	2770	3060	3220	3250	3430
14	2500	2750	2590	2480	2340	2240	978	3060	3260	3220	3250	3430
15	2660	2750	2310	2480	2340	2320	1020	3420	3180	3220	3250	3430
16	2660	2750	2270	2440	2380	2160	1020	3420	3180	3180	3250	3320
17	2700	2750	2400	2440	2340	2140	1060	2770	3260	3220	3360	3320
18	2620	2750	2480	2440	2260	2120	1120	2850	3260	3220	3250	3220
19	2540	2770	2380	2440	2260	1960	1120	2930	3220	3390	3250	3220
20	2750	2810	2060	2390	2260	1710	1260	3020	3260	3040	3250	---
21	2580	2890	2210	2350	2140	2040	1630	3060	3220	---	3210	3170
22	2410	2570	2380	2310	2220	2040	1550	3260	3260	2870	3360	3320
23	2450	2570	2550	2350	2220	2120	1670	3260	3160	3330	3250	3430
24	2540	2530	2550	2420	2340	2220	1830	3420	3160	3330	3360	3430
25	2620	2590	2500	2420	2340	2220	1920	3360	---	3330	3320	3540
26	2700	---	2330	2420	2480	2160	1830	3460	---	3330	3320	3430
27	2790	2770	2330	2390	2420	1870	1920	3460	3360	3330	3210	3320
28	2750	2770	1780	2390	2420	1870	2000	3360	3360	3330	3250	3320
29	2700	2730	2060	2420	---	1670	1830	3360	3460	---	3250	3320
30	2750	2710	2060	2440	---	2020	1870	3460	3360	2970	3320	3320
31	2790	---	2290	2560	---	2140	---	3360	---	3330	3420	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.5	17.0	12.0	9.0	7.0	15.5	19.0	21.0	21.0	29.0	24.0	24.0
2	21.0	17.0	11.0	10.0	8.0	13.0	19.0	23.0	21.0	27.0	25.0	24.0
3	22.0	17.0	11.0	9.0	9.0	13.5	18.0	21.5	23.0	27.0	24.0	24.0
4	22.0	16.0	13.0	9.0	---	13.0	18.0	21.0	26.0	28.0	24.0	23.5
5	22.0	16.0	12.0	10.0	---	12.0	17.5	20.5	28.0	28.0	24.0	22.0
6	22.0	16.0	12.0	12.0	---	13.0	18.0	22.0	28.0	26.0	26.0	22.0
7	23.0	16.0	12.0	10.0	9.0	13.0	18.0	21.0	28.0	28.0	26.0	23.0
8	23.0	15.0	13.5	10.0	10.0	14.0	18.0	21.0	27.0	30.5	25.0	23.0
9	22.5	15.0	14.0	11.0	10.0	16.5	18.0	21.0	27.0	28.0	26.0	23.0
10	22.0	13.0	13.0	11.0	11.0	18.0	18.0	18.0	27.0	30.0	27.0	23.0
11	---	14.0	12.0	11.0	11.0	15.0	18.0	19.0	25.0	28.0	27.0	22.0
12	20.0	14.0	11.0	10.0	13.0	15.5	18.5	22.0	26.0	---	27.0	22.0
13	19.0	15.0	10.0	10.0	14.0	15.0	19.0	19.0	26.0	28.0	26.0	23.0
14	19.0	15.0	10.0	10.0	14.0	16.0	19.0	19.0	26.0	28.0	25.0	23.0
15	15.0	17.0	13.0	10.5	14.5	15.0	17.5	20.0	27.0	27.0	25.0	23.0
16	16.0	18.0	12.0	10.0	14.0	15.0	17.5	21.0	26.0	27.0	28.0	23.0
17	15.0	14.0	10.0	10.0	14.5	18.0	17.0	26.0	28.0	26.0	29.0	21.0
18	17.0	14.0	11.0	12.0	14.0	15.0	15.5	26.0	28.0	23.5	25.0	20.0
19	17.5	14.0	12.0	12.0	17.0	17.0	15.5	25.0	27.0	27.0	25.0	22.0
20	16.5	14.0	10.0	12.0	12.0	16.0	15.0	26.0	25.0	26.0	25.0	23.0
21	15.5	13.0	11.0	12.5	12.0	15.5	17.0	24.0	25.5	25.5	25.0	24.0
22	15.5	15.0	10.0	12.0	13.0	15.0	17.0	26.0	26.0	26.0	27.0	24.0
23	15.0	15.0	10.0	10.0	13.0	16.0	19.0	26.0	26.0	26.0	27.0	23.0
24	14.0	14.0	10.5	12.0	13.0	17.0	19.0	25.0	21.0	27.0	28.0	23.0
25	16.0	12.0	11.0	13.0	14.0	15.0	15.0	25.0	23.0	27.0	28.0	24.0
26	17.0	10.0	12.0	13.0	14.0	15.0	14.0	20.0	24.0	28.0	28.0	23.0
27	17.0	11.0	12.0	12.5	14.5	15.0	18.0	23.0	25.0	27.0	27.0	24.0
28	15.5	11.0	12.0	11.0	14.0	12.0	21.0	23.0	25.0	27.0	26.0	25.0
29	18.0	11.0	13.0	12.0	---	10.0	21.0	20.0	23.0	26.0	25.0	23.0
30	15.5	12.0	13.0	10.0	---	14.0	21.0	23.0	28.0	23.0	27.0	23.0
31	15.5	---	10.0	6.5	---	16.0	---	23.0	---	23.0	25.0	---
MAX	---	18.0	14.0	13.0	---	18.0	21.0	26.0	28.0	---	29.0	25.0
MIN	---	10.0	10.0	6.5	---	10.0	14.0	18.0	21.0	---	24.0	20.0

09415230 VIRGIN RIVER ABOVE HALFWAY WASH NEAR RIVERSIDE, NV
(National stream-quality accounting network station)

LOCATION.--Lat 36°40'28", long 114°17'54", in NE¼SW¼NE¼ sec.32, T.14 S., R.69 E., Clark County, Hydrologic Unit 15010010, on left bank, 1.3 mi upstream from Halfway Wash, 6.1 mi southeast of Riverside, and 7.5 mi upstream from waterline of Lake Mead at altitude 1,221 ft, National Geodetic Vertical Datum of 1929.

DRAINAGE AREA.--5,980 mi^2, approximately.

PERIOD OF RECORD.--December 1977 to current year.
CHEMICAL ANALYSES, MICROBIOLOGICAL, AND SEDIMENT DATA: January 1978 to September 1980, monthly; October 1980 to current year, every two months.
SPECIFIC CONDUCTANCES AND WATER TEMPERATURES: December 1977 to April 1978, monthly; May 1978 to September 1982, once daily; October 1982 to current year, every two months.
BIOLOGICAL DATA: March 1978 to September 1980, monthly (seasonal); October 1980 to September 1981, every two months.

REMARKS.--Listed frequencies of measurement apply except during summer periods of no flow.

EXTREMES MEASURED FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCES: Maximum, 5,260 micromsiemens Sept. 16, 1978; minimum, 770 micromsiemens May 26, 1983.
PHYTOPLANKTON: Maximum, 8,200 cells/mL May 28, 1981; minimum, 27 cells/mL Mar. 30, 1978.
FECAL STREPTOCOCCI: Maximum, 41,000 colonies/100 mL (non-ideal colony count) July 29, 1982; minimum, 100 colonies/100 mL (non-ideal colony count) June 28, 1979.
WATER TEMPERATURES: Maximum, 36.5°C July 31, 1982; minimum, 3.5°C Jan. 1, 1979.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 12,000 mg/L July 29, Sept. 29, 1982; minimum, 166 mg/L Sept. 27, 1978.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV 1984 30...	1230	264	2850	8.30	17.0	11.0	230	729	10.2	98	14	K300
JAN 1985 31...	1445	314	2200	8.40	1.5	7.5	94	729	11.1	--	<10	K13
MAR 30...	1200	406	2050	8.10	19.0	14.0	1300	734	9.6	97	69	K600
MAY 31...	1130	38	4100	8.10	29.5	27.0	31	721	7.3	98	34	K100
JUL 31...	1130	117	3350	8.00	36.0	27.0	2600	725	6.8	91	59	2800
SEP 25...	1230	73	3730	8.00	28.0	24.5	210	726	7.4	94	26	420

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)
NOV 1984 30...	2500	1000	740	260	84	270	4	24	262	810	380	0.7
JAN 1985 31...	K330	1000	750	260	88	240	3	19	266	710	340	0.6
MAR 30...	1600	730	290	190	61	170	3	14	440	560	220	0.5
MAY 31...	260	1400	1200	320	140	370	4	35	212	1300	580	0.8
JUL 31...	6200	1200	1000	340	95	300	4	28	196	1100	410	0.8
SEP 25...	460	1600	1400	360	160	380	4	35	186	1300	540	0.9

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09415230 VIRGIN RIVER ABOVE HALFWAY WASH NEAR RIVERSIDE, NV--Continued

WATER QUALITY DATA

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
NOV 1984												
30...	20	2040	2000	2.8	0.72	0.15	2.1	0.63	--	0.03	0.03	0.09
JAN 1985												
31...	19	1890	1800	2.6	0.67	0.16	1.1	0.43	--	0.04	0.05	0.15
MAR												
30...	14	1430	1500	1.9	0.54	0.12	2.3	1.60	--	0.03	0.02	0.06
MAY												
31...	23	3140	2900	4.3	<0.10	0.16	0.7	0.15	0.46	<0.01	<0.01	--
JUL												
31...	8.0	2550	2400	3.5	0.58	0.10	1.2	0.99	3.0	<0.01	<0.01	--
SEP												
25...	20	2950	2900	4.0	0.33	0.13	0.8	0.42	1.3	<0.01	0.01	0.03

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV 1984												
30...	20	5	<100	<10	<1	30	<1	<1	60	1	350	20
JAN 1985												
31...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
30...	20	4	100	<10	<1	<1	<1	1	60	2	220	10
MAY												
31...	<10	3	200	<10	<1	<1	1	2	40	7	620	20
JUL												
31...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
25...	10	5	<100	<10	<1	<1	<1	1	30	<1	600	30

DATE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 1984											
30...	<0.1	<1	2	1	1	3800	12	<10	--	1650	1180
JAN 1985											
31...	--	--	--	--	--	--	--	--	30	1940	1640
MAR											
30...	<0.1	<1	3	1	<1	340	4	20	74	3940	4320
MAY											
31...	<0.1	5	2	<1	<1	6800	11	20	42	429	44
JUL											
31...	--	--	--	--	--	--	--	--	93	6110	1930
SEP											
25...	<0.1	4	3	2	<1	3800	11	10	60	1220	240

< Actual value is known to be less than value shown.

09419700 LAS VEGAS WASH NEAR HENDERSON, NV

LOCATION.--Lat 36 05'20", long 114 59'05", in SE¼SW¼ sec.30, T.21 S., R.63 E., Clark County, Hydrologic Unit 15010015, on right bank at upstream end of 4.5-ft pipe culvert on road, 3.5 mi north of Henderson, and 6.0 mi upstream from high waterline of Lake Mead at altitude 1,221.4 ft, National Geodetic Vertical Datum of 1929.

DRAINAGE AREA.--2,125 mi^2, of which 1,518 mi^2 contribute directly to surface runoff. Prior to Apr. 4, 1961, 2,179 mi^2, of which 1,571 mi^2 contributed directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1957 to September 1983 and October 1984 to September 1985.

REVISED RECORDS.--WSP 1926: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,540 ft, from topographic map. Prior to Apr. 4, 1961, at site 2.5 mi downstream at various datums.

REMARKS.--Records fair. In a closed basin above station, 2,150 acres are irrigated, mostly by pumping from ground water. Discharge includes waste water from industrial plants and sewage effluent.

AVERAGE DISCHARGE.--27 years, 49.2 ft^3/s, 35,650 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,510 ft^3/s July 4, 1975, gage height, 10.67 ft, from floodmarks, from rating curve extended above 3,340 ft^3/s on basis of area-velocity computation to determine peak flow, maximum gage height, 12.15 ft Aug. 11, 1983; minimum daily, 4.8 ft^3/s Aug. 17, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 554 ft^3/s Dec. 27, gage height, 15.72 ft; minimum daily, 86 ft^3/s June 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	114	116	116	117	119	115	111	94	107	111	114
2	113	112	116	114	119	119	114	110	97	104	116	115
3	112	113	115	112	118	120	116	108	104	108	119	119
4	116	114	110	112	120	119	112	107	101	106	124	126
5	119	114	110	113	117	119	108	107	95	106	132	129
6	125	117	109	115	114	117	112	108	96	104	101	129
7	125	116	111	145	114	112	119	107	94	107	116	129
8	115	115	132	149	114	108	116	107	90	108	120	128
9	109	113	124	119	118	108	119	107	86	106	121	128
10	117	115	114	113	117	107	115	108	94	106	117	124
11	122	116	134	112	114	109	115	107	98	108	106	124
12	124	117	119	114	113	109	108	102	102	108	106	120
13	117	118	112	118	114	109	107	102	99	109	109	123
14	112	116	110	116	109	110	105	101	95	110	114	122
15	114	114	109	114	115	108	108	99	96	110	114	121
16	113	112	111	113	114	110	109	99	94	108	121	122
17	108	112	106	113	113	113	108	100	95	108	117	125
18	112	113	106	113	101	111	119	101	96	126	117	127
19	112	116	198	113	108	111	124	104	97	187	110	131
20	114	118	183	114	102	111	111	104	98	114	111	126
21	116	116	120	115	106	111	110	104	101	119	112	126
22	117	259	110	116	106	111	109	104	100	174	115	125
23	117	199	111	116	106	111	109	106	101	119	116	126
24	119	127	110	116	108	111	103	107	104	117	117	122
25	116	165	111	114	109	111	102	106	104	115	116	120
26	113	129	111	114	112	113	102	106	100	114	115	116
27	113	120	279	117	114	114	107	107	104	114	116	119
28	117	118	169	119	118	115	107	106	100	114	118	123
29	118	118	124	120	---	116	110	101	101	113	116	123
30	116	118	122	117	---	116	109	94	108	111	116	126
31	115	---	120	115	---	117	---	94	---	111	115	---
TOTAL	3589	3764	3932	3627	3150	3495	3328	3234	2944	3571	3574	3708
MEAN	116	125	127	117	112	113	111	104	98.1	115	115	124
MAX	125	259	279	149	120	120	124	111	108	187	132	131
MIN	108	112	106	112	101	107	102	94	86	104	101	114
AC-FT	7120	7470	7800	7190	6250	6930	6600	6410	5840	7080	7090	7350

WTR YR 1985 TOTAL 41916 MEAN 115 MAX 279 MIN 86 AC-FT 83140

09419700 LAS VEGAS WASH NEAR HENDERSON, NV--Continued

PERIOD OF RECORD.--February 1957 to October 1961, September and October 1962, May 1963 to June 1965, and December 1965 to current year.

CHEMICAL ANALYSES: January 1964 to January 1965, twice monthly; October 1967 to January 1969, weekly; February 1969 to January 1970 and July 1970 to September 1985, monthly.

SPECIFIC CONDUCTANCES: January 1964 to January 1965, twice monthly; October to November 1967 and April 1968 to January 1969, weekly; February 1969 to January 1970 and July 1970 to current year, monthly.

WATER TEMPERATURES: February 1957 to October 1961, September and October 1962, May 1963 to June 1965, and December 1965 to current year, monthly.

SEDIMENT DATA: January 1977 to September 1985, monthly.

REMARKS.--Discharge includes sewage effluent and some wastewater from industrial plants. City and County sewage treatment plants implemented chemical removal of phosphorus from effluent during water year 1981.

COOPERATION.--All water-quality sampling and analyses prior to July 1970, plus nutrient analyses for period July 1970 to September 1972, from U.S. Environmental Protection Agency. Data in addition to those listed under "Period of Record" for January 1964 to June 1970 may exist in files of U.S. Environmental Protection Agency.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 6,960 microsiemens Sept. 19, 1968; minimum, 1,660 microsiemens Feb. 13, 1979.

WATER TEMPERATURES: Maximum, 28.0°C July 30, Sept. 3, 1958; minimum, 2.0°C Jan. 31, 1972.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 347 mg/L July 11, 1978 (questionable value not verified by duplicate determination; second-highest value for period of record, 78 mg/L); minimum, 1 mg/L Aug. 1, 1983.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS (MG/L AS CACO3) (00900)
OCT 1984 18...	1015	101	2800	7.80	17.0	18.0	728	9.4	105	790
NOV 13...	1015	113	2750	7.80	19.0	17.5	722	8.4	94	--
DEC 05...	1345	103	2950	7.80	17.0	17.0	726	8.4	92	--
JAN 1985 14...	1215	113	2620	7.70	11.0	14.5	727	8.0	83	860
FEB 13...	1215	109	2800	7.40	16.0	16.0	729	6.9	74	--
MAR 13...	1230	101	2820	7.40	20.0	18.0	723	5.9	66	--
APR 17...	1000	102	2880	7.40	25.0	19.5	717	5.5	64	790
MAY 14...	0900	104	--	7.10	20.5	20.5	721	5.4	63	--
JUN 17...	0830	88	2420	7.50	33.0	24.5	719	5.0	64	--
JUL 18...	0715	109	2120	7.60	27.0	25.5	721	4.7	61	600
AUG 15...	0915	94	2170	7.60	30.0	24.5	719	5.4	69	--
SEP 16...	1015	100	2100	7.60	31.0	23.5	719	5.6	70	--

09419700 LAS VEGAS WASH NEAR HENDERSON, NV--Continued

WATER QUALITY DATA

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT 1984 18...	670	180	82	250	4	18	770	330	0.6	26
NOV 13...	--	--	--	--	--	--	--	--	--	--
DEC 05...	--	--	--	--	--	--	--	--	--	--
JAN 1985 14...	680	190	94	260	4	18	900	330	0.5	24
FEB 13...	--	--	--	--	--	--	--	--	--	--
MAR 13...	--	--	--	--	--	--	--	--	--	--
APR 17...	680	180	82	300	5	21	870	390	0.5	25
MAY 14...	--	--	--	--	--	--	--	--	--	--
JUN 17...	--	--	--	--	--	--	--	--	--	--
JUL 18...	510	140	61	210	4	15	580	260	0.5	21
AUG 15...	--	--	--	--	--	--	--	--	--	--
SEP 16...	--	--	--	--	--	--	--	--	--	--

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 1984 18...	1780	1700	2.4	0.38	0.32	0.70	13.0	2.0	15
NOV 13...	--	--	--	0.39	0.21	0.60	14.0	0.0	14
DEC 05...	--	--	--	0.34	0.16	0.50	14.0	0.0	14
JAN 1985 14...	1970	1900	2.7	0.47	0.13	0.60	13.0	2.0	15
FEB 13...	--	--	--	0.33	0.07	0.40	17.0	1.0	18
MAR 13...	--	--	--	0.15	0.05	0.20	15.0	5.0	20
APR 17...	1950	1900	2.7	0.52	0.08	0.60	15.0	0.0	15
MAY 14...	--	--	--	0.08	0.12	0.20	16.0	0.0	16
JUN 17...	--	--	--	0.08	0.12	0.20	15.0	0.0	15
JUL 18...	1410	1300	1.9	0.10	0.10	0.20	14.0	0.0	14
AUG 15...	--	--	--	0.11	0.19	0.30	13.0	0.0	13
SEP 16...	--	--	--	0.13	0.17	0.30	13.0	0.0	12

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1984 18...	16	69	0.70	--	0.61	--	--	42	11
NOV 13...	15	65	0.79	--	--	--	--	33	10
DEC 05...	15	64	0.87	--	--	--	--	417	116
JAN 1985 14...	16	69	1.20	--	0.55	--	34	1580	482
FEB 13...	18	81	1.20	--	--	--	39	1580	465
MAR 13...	20	89	1.20	--	--	--	25	1020	278
APR 17...	16	69	1.50	--	0.65	--	59	482	133
MAY 14...	16	72	0.70	--	--	--	53	251	70
JUN 17...	15	67	1.10	3.4	--	0.5	54	426	101
JUL 18...	14	63	0.87	2.7	0.69	--	--	238	70
AUG 15...	13	59	0.60	1.8	--	--	--	196	50
SEP 16...	12	54	0.92	2.8	--	--	28	893	241

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1964 to January 1965, September 1966 to current year.
CHEMICAL ANALYSES: January 1964 to January 1965, twice monthly; September 1966 to January 1969, weekly; February to October 1969, monthly; November 1969 to January 1970, twice monthly; Febrary 1970 to July 1974, monthly; August 1974 to September 1980, twice monthly; October 1980 to September 1985, monthly.
SPECIFIC CONDUCTANCES: January 1964 to January 1965, twice monthly; September 1966 to December 1967 and May 1968 to January 1969, weekly; February to October 1969, monthly; November 1969 to January 1970, twice monthly; February 1970 to July 1974, monthly; August 1974 to May 1975, twice monthly; June 1975 to March 1976, 4 times per hour (incomplete record due to recorder malfunctions) and twice monthly; April to October 1976, twice monthly; November 1976 to September 1977, 4 times per hour (incomplete record due to recorder malfunctions) and twice monthly; October 1977 to May 1978, 2-4 times per month; June 1978 to January 1979, 3-5 times per week; February to August 1979, twice monthly; September and October 1979, 4 times per hour; November 1979 to current year, hourly.
MICROBIOLOGICAL DATA: October 1977 to September 1980, twice monthly (data prior to October 1977 unpublished); October 1980 to September 1985, monthly.
WATER TEMPERATURES: January to December 1968, weekly; August 1969 to July 1974, monthly; August 1974 to May 1978, twice monthly; June 1978 to January 1979, 3-5 times per week; February to October 1979, twice monthly; November 1979 to current year, hourly.
SEDIMENT DATA: January 1974 to December 1976, monthly; January 1977 to August 1979, twice monthly; September 1979 to December 1980, monthly; January 1981 to September 1981, twice monthly; October 1981 to September 1985, monthly.

INSTRUMENTATION.--Specific-conductance recorder from June 1975 to March 1976, November 1976 to April 1978, and August 1979 to current year. Temperature recorder from November 1979 to current year.

REMARKS.--Discharge includes sewage effluent and wastewater from industrial plants. City and county sewage treatment plants implemented chemical removal of phosphorus from effluent during water year 1981. Periods of no record for daily specific conductance and temperature are due to malfunctions of the recorder and periodic burial of the probes by sediment deposits.

COOPERATION.--Microbiological analyses prior to October 1978 by Nevada Bureau of Laboratories and Research. All water-quality sampling and analyses to October 1969, plus nutrient and trace-metal analyses for period October 1969 to September 1972, from U.S. Environmental Protection Agency. Data in addition to those listed under "Period of Record" for January 1964 to September 1969 may exist in files of U.S. Environmental Protection Agency.

EXTREMES MEASURED FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCES: Maximum, 9,120 microsiemens Sept. 8, 1964; minimum, 1,390 microsiemens July 7, 1985.
FECAL STREPTOCOCCI: Maximum, 22,000 colonies/100 mL (non-ideal colony count) Dec. 1, 1982; minimum, 55 colonies/100 mL Jan. 10, 1977.
WATER TEMPERATURES: Maximum, 29.5°C July 4, 17, 1984; minimum, 3.0°C Jan. 7, 1970.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 113,000 mg/L Aug. 11, 1983 (hand-dipped sample; not depth integrated); minimum, 111 mg/L Jan. 28, 1975.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE DAILY).--
SPECIFIC CONDUCTANCES: Maximum, 3,570 microsiemens Feb. 5; minimum, 1,390 microsiemens July 7.
WATER TEMPERATURES: Maximum, 30.5°C July 5, 11-12; minimum, 9.5°C Feb. 1.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1984										
18...	1200	E100	2900	8.00	18.0	17.5	734	8.4	92	51
NOV										
13...	1330	E110	2820	8.00	20.0	18.0	727	9.0	101	37
DEC										
05...	1300	E100	3100	8.00	19.0	16.5	734	9.3	100	74
JAN 1985										
14...	1315	E110	2820	8.10	12.0	15.0	734	9.1	95	58
FEB										
13...	1345	E110	2850	7.80	15.5	17.0	735	8.9	96	10
MAR										
13...	1015	E110	3000	7.80	18.0	16.5	732	9.0	97	41
APR										
17...	0815	E110	2800	7.60	23.5	18.5	724	7.7	87	84
MAY										
14...	1015	E100	2680	7.60	22.5	20.5	727	7.6	89	18
JUN										
17...	0745	E90	2620	7.60	31.0	22.5	726	7.6	93	89
JUL										
18...	0945	E110	2200	7.80	29.0	25.0	730	6.6	84	47
AUG										
15...	1015	E90	2520	8.00	32.0	25.0	724	7.0	90	35
SEP										
16...	0900	E100	2280	7.80	30.5	22.0	725	7.4	90	33

E Estimated

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

WATER QUALITY DATA

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT 1984 18...	K80	310	960	850	240	88	270	4	19	980
NOV 13...	77	1700	--	--	--	--	--	--	--	--
DEC 05...	K17	760	--	--	--	--	--	--	--	--
JAN 1985 14...	K40	2000	1000	690	250	100	300	4	23	950
FEB 13...	--	--	--	--	--	--	--	--	--	--
MAR 13...	K60	200	--	--	--	--	--	--	--	--
APR 17...	110	1200	810	690	190	81	280	4	24	890
MAY 14...	K38	1100	--	--	--	--	--	--	--	--
JUN 17...	140	880	--	--	--	--	--	--	--	--
JUL 18...	180	780	740	670	180	70	230	4	19	700
AUG 15...	400	150	--	--	--	--	--	--	--	--
SEP 16...	140	420	--	--	--	--	--	--	--	--

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 1984 18...	340	0.7	30	2140	2000	2.9	1.35	0.65	2.00	7.70
NOV 13...	--	--	--	2100	--	--	1.42	0.38	1.80	12.0
DEC 05...	--	--	--	2370	--	--	1.33	0.27	1.60	12.0
JAN 1985 14...	350	0.6	29	2190	2200	3.0	1.03	0.17	1.20	11.0
FEB 13...	--	--	--	2190	--	--	1.04	0.26	1.30	12.0
MAR 13...	--	--	--	2160	--	--	1.09	0.31	1.40	12.0
APR 17...	350	0.6	27	1930	1900	2.6	1.11	0.59	1.70	13.0
MAY 14...	--	--	--	1910	--	--	1.33	0.77	2.10	13.0
JUN 17...	--	--	--	1760	--	--	1.10	1.10	2.20	12.0
JUL 18...	290	0.6	24	1650	1600	2.2	0.90	1.40	2.30	11.0
AUG 15...	--	--	--	1700	--	--	0.90	1.60	2.50	9.40
SEP 16...	--	--	--	1570	--	--	0.91	0.99	1.90	11.0

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS TOTAL (MG/L AS PO4) (71886)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDIMENT, SUSPENDED (MG/L) (80154)
OCT 1984 18...	4.3	12	14	62	1.00	--	0.49	58	1200
NOV 13...	0.0	12	14	61	0.93	--	--	62	570
DEC 05...	1.0	13	15	65	1.50	--	--	50	1690
JAN 1985 14...	3.0	14	15	67	1.50	--	0.43	58	1750
FEB 13...	3.0	15	16	72	0.82	--	--	64	354
MAR 13...	7.0	19	20	90	0.71	--	--	71	170
APR 17...	2.0	15	17	74	1.50	--	0.64	79	336
MAY 14...	0.0	12	14	62	1.00	--	--	61	256
JUN 17...	0.0	12	14	63	1.30	4.0	--	68	558
JUL 18...	1.0	12	14	63	1.00	3.1	0.59	--	278
AUG 15...	0.6	10	12	55	0.47	1.4	--	55	322
SEP 16...	0.0	10	12	53	0.97	3.0	--	--	334

K Based on non-ideal colony count.

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	2810	2500	2700
16	---	---	---	---	---	---	---	---	---	2850	2720	2770
17	---	---	---	---	---	---	---	---	---	2990	2650	2830
18	---	---	---	---	---	---	---	---	---	2960	2710	2840
19	---	---	---	---	---	---	---	---	---	2930	2740	2850
20	---	---	---	---	---	---	---	---	---	2930	2510	2800
21	---	---	---	---	---	---	---	---	---	2800	2360	2540
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	3570	3260	3420	---	---	---	---	---	---	---	---	---
6	3380	3230	3300	---	---	---	---	---	---	---	---	---
7	3330	3110	3220	---	---	---	---	---	---	---	---	---
8	3240	3040	3140	---	---	---	---	---	---	---	---	---
9	3260	2990	3160	---	---	---	---	---	---	---	---	---
10	3190	2970	3120	---	---	---	---	---	---	---	---	---
11	3250	3030	3140	---	---	---	---	---	---	---	---	---
12	3070	2800	2950	---	---	---	---	---	---	---	---	---
13	2890	2660	2840	---	---	---	---	---	---	---	---	---
14	2960	2580	2720	---	---	---	---	---	---	---	---	---
15	2790	2630	2680	---	---	---	---	---	---	---	---	---
16	2780	2640	2680	---	---	---	---	---	---	---	---	---
17	2700	2590	2630	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	2530	2420	2460	---	---	---	2340	2240	2280
2	---	---	---	2630	2430	2510	---	---	---	2310	2150	2240
3	---	---	---	2460	1920	2240	---	---	---	2350	2150	2220
4	---	---	---	1930	1510	1770	---	---	---	2320	2230	2260
5	---	---	---	1600	1470	1550	---	---	---	2400	2290	2340
6	---	---	---	1630	1470	1550	---	---	---	2470	2340	2380
7	---	---	---	1670	1390	1470	---	---	---	2450	2350	2390
8	---	---	---	1640	1450	1560	---	---	---	2430	2320	2360
9	---	---	---	1670	1540	1600	---	---	---	2440	2320	2360
10	---	---	---	1750	1610	1680	---	---	---	2510	2350	2400
11	---	---	---	1760	1600	1680	---	---	---	2470	2380	2420
12	---	---	---	1970	1740	1870	---	---	---	2570	2350	2430
13	---	---	---	2120	1940	2030	---	---	---	2490	2340	2380
14	---	---	---	2150	1990	2070	---	---	---	2430	2310	2360
15	---	---	---	2280	2140	2200	---	---	---	2430	2280	2340
16	---	---	---	2340	2200	2240	---	---	---	2450	2260	2320
17	---	---	---	2480	2280	2350	---	---	---	2430	2270	2340
18	---	---	---	2450	2430	2440	---	---	---	2390	2210	2310
19	---	---	---	---	---	---	---	---	---	2450	2290	2350
20	---	---	---	---	---	---	---	---	---	2530	2310	2400
21	---	---	---	---	---	---	---	---	---	2500	2330	2390
22	---	---	---	---	---	---	---	---	---	2420	2290	2340
23	---	---	---	---	---	---	2540	2380	2450	2400	2270	2320
24	2560	2160	2450	---	---	---	2580	2350	2430	2480	2310	2370
25	2640	2290	2480	---	---	---	2530	2310	2380	2470	2320	2360
26	2680	2460	2550	---	---	---	2500	2310	2360	2480	2310	2370
27	2600	2450	2520	---	---	---	2430	2160	2300	2440	2290	2350
28	2620	2450	2520	---	---	---	2310	2120	2180	2390	2290	2330
29	2530	2320	2440	---	---	---	2370	2120	2200	2350	2280	2300
30	2540	2300	2420	---	---	---	2340	2180	2230	2380	2230	2290
31	---	---	---	---	---	---	2340	2160	2230	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	2570	2150	2343

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.5	22.0	23.0	20.5	15.5	17.5				---	---	---
2	22.5	21.5	22.0	---	---	---				---	---	---
3	21.5	21.0	21.0	---	---	---				---	---	---
4	21.5	19.5	21.0	---	---	---				---	---	---
5	22.0	20.5	21.5	---	---	---				---	---	---
6	22.0	21.5	22.0	---	---	---				---	---	---
7	22.5	21.0	22.0	---	---	---				---	---	---
8	23.5	21.5	22.5	---	---	---				---	---	---
9	23.0	22.0	22.5	---	---	---				---	---	---
10	22.5	21.5	22.0	---	---	---				---	---	---
11	---	---	---	---	---	---				---	---	---
12	22.0	21.0	22.0	---	---	---				---	---	---
13	24.0	19.0	21.0	---	---	---				---	---	---
14	23.0	19.5	21.0	---	---	---				---	---	---
15	20.5	16.5	18.5	---	---	---				16.0	11.5	13.5
16	21.0	16.5	18.0	---	---	---				15.5	12.5	13.5
17	21.0	16.0	17.5	---	---	---				16.5	12.0	13.5
18	19.5	16.0	17.0	---	---	---				16.5	12.5	14.0
19	20.0	15.5	17.5	---	---	---				17.0	12.5	14.5
20	21.0	16.5	18.0	---	---	---				17.0	12.5	14.5
21	20.5	17.0	18.0	---	---	---				17.0	13.0	14.5
22	19.5	15.5	17.0	---	---	---				15.0	13.0	14.0
23	19.0	15.0	16.5	---	---	---				16.0	13.5	14.5
24	19.5	15.0	17.0	---	---	---				17.0	13.5	14.5
25	19.5	15.5	17.0	---	---	---				16.5	12.5	14.5
26	19.5	15.0	17.0	---	---	---				17.0	13.5	15.0
27	21.0	16.0	18.0	---	---	---				17.5	14.0	15.5
28	20.5	16.0	18.0	---	---	---				16.5	13.0	14.5
29	20.5	16.0	18.0	---	---	---				16.5	13.0	14.5
30	20.5	16.0	18.0	---	---	---				15.5	11.0	13.0
31	21.0	17.0	18.5	---	---	---				12.5	10.0	11.0
MONTH	24.0	15.0	19.5	20.5	15.5	17.5				17.5	10.0	14.0

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	13.5	9.5	11.0									
2	12.5	11.0	11.5									
3	13.5	11.0	12.5									
4	15.0	11.0	12.5									
5	14.0	10.5	12.0									
6	14.0	10.5	12.0									
7	14.0	10.5	12.0									
8	15.0	11.5	13.0									
9	16.0	13.5	14.5									
10	15.5	12.0	13.5									
11	15.5	11.5	13.5									
12	16.5	12.5	14.0									
13	17.5	12.5	15.0									
14	18.5	13.5	15.5									
15	18.5	13.0	15.5									
16	18.5	13.5	15.5									
17	17.5	14.5	15.0									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	18.5	9.5	13.5									

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	28.5	21.0	24.5	---	---	---	28.0	23.5	25.0
2	---	---	---	29.0	22.0	25.0	---	---	---	26.5	23.0	24.0
3	---	---	---	29.0	21.5	25.5	---	---	---	26.5	22.0	23.5
4	---	---	---	29.5	22.5	26.0	---	---	---	25.0	21.0	22.5
5	---	---	---	30.5	23.5	26.5	---	---	---	24.5	21.5	22.5
6	---	---	---	30.0	24.5	26.5	---	---	---	23.5	21.0	22.0
7	---	---	---	29.5	24.5	26.5	---	---	---	25.5	20.0	22.0
8	---	---	---	30.0	24.0	26.5	---	---	---	25.0	21.0	22.5
9	---	---	---	30.0	25.5	27.0	---	---	---	25.0	21.0	22.5
10	---	---	---	30.0	24.5	27.0	---	---	---	24.5	20.0	22.0
11	---	---	---	30.5	25.0	27.0	---	---	---	22.5	19.0	20.5
12	---	---	---	30.5	24.5	27.0	---	---	---	24.5	18.5	21.0
13	---	---	---	30.0	24.0	27.0	---	---	---	25.0	19.0	21.5
14	---	---	---	30.0	24.5	26.5	---	---	---	24.5	19.0	21.5
15	---	---	---	28.5	24.5	26.5	---	---	---	25.5	20.0	22.0
16	---	---	---	27.0	24.5	26.0	---	---	---	25.5	20.5	22.0
17	---	---	---	28.0	24.0	25.5	---	---	---	24.5	20.0	21.5
18	---	---	---	25.0	24.5	25.0	---	---	---	21.5	20.0	21.0
19	---	---	---	---	---	---	---	---	---	23.5	20.0	21.0
20	---	---	---	---	---	---	---	---	---	24.5	19.0	21.5
21	---	---	---	---	---	---	---	---	---	25.0	19.5	21.5
22	---	---	---	---	---	---	---	---	---	25.0	19.5	22.0
23	---	---	---	---	---	---	28.5	24.0	26.5	24.5	19.5	22.0
24	24.5	21.5	23.0	---	---	---	28.0	22.0	25.0	25.5	20.0	22.5
25	27.0	21.0	23.5	---	---	---	27.5	23.5	25.0	25.5	20.0	22.5
26	26.5	20.0	23.0	---	---	---	28.0	23.5	25.5	25.0	19.5	22.0
27	27.5	20.0	23.5	---	---	---	28.5	24.5	26.0	25.0	21.5	22.0
28	27.5	20.5	24.0	---	---	---	27.5	23.0	25.0	25.5	21.0	22.5
29	25.5	22.0	23.5	---	---	---	27.0	22.5	24.5	24.0	20.0	21.5
30	28.0	21.5	24.0	---	---	---	27.0	22.0	24.5	24.0	19.5	21.5
31	---	---	---	---	---	---	27.0	23.5	25.0	---	---	---
MONTH	28.0	20.0	23.5	30.5	21.0	26.0	28.5	22.0	25.0	28.0	18.5	22.0
YEAR	30.5	9.5	20.0									

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV

LOCATION.--Lat 36°00'58", long 114°44'13", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, Mohave-Clark Counties, Hydrologic Unit 15010005, in center of Hoover Dam on Colorado River.

DRAINAGE AREA.--171,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

RESERVOIR-CONTENTS RECORDS

PERIOD OF RECORD.--Contents: February 1935 to current year. Evaporation: March 1952 to current year. Diversions (monthly totals only): to Boulder City area, since October 1935; to Henderson and Las Vegas areas, since April 1942; combined diversions since October 1968. Prior to 1946 published as "at Boulder Dam."

REVISED RECORDS.--WSP 899: 1935-39.

GAGE.--Water-stage indicator read once daily at midnight, with supplementary water-stage recorder. Datum of gage is 0.00 ft to Local Powerhouse datum and is 0.40 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete arch-gravity dam; storage began Feb. 1, 1935; dam completed Mar. 1, 1936. Total capacity (based on 1963-64 resurvey by Coast and Geodetic Survey; capacity table put into use Apr. 1, 1967), 29,755,000 acre-ft, consisting of the following: Dead storage, 2,378,000 acre-ft below gage height 850.0 ft--gage sills in outlet towers; usable contents, 26,159,000 acre-ft between gage heights 895.0 ft and 1,211.4 ft (top of automatic spillway gates in raised position; and uncontrolled storage, 1,218,000 acre-ft between gage heights 1,221.4 ft) and 1,229.0 ft (maximum water surface). Reservoir is used to store water for flood control, irrigation, municipal water supply, and power development. Figures given herein represent usable contents.

DIVERSIONS FROM LAKE MEAD.--Diversions to Boulder City area at dam; diversions to Henderson and Las Vegas areas from intakes 6 mi upstream. Diversions measured by Venturi meters. Water used for municipal and industrial purposes.

COOPERATION.--Records of gage height and contents furnished by Bureau of Reclamation. Records of diversions from Lake Mead furnished by Bureau of Reclamation and Colorado River Commission of Nevada.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,790,000 acre-ft July 29, 30, 1941 (on basis of original bathymetry), gage height, 1,220.45 ft; maximum gage height, 1,225.85 ft July 24, 1983 (equivalent to 26,868,000 acre-ft on basis of resurveyed bathymetry of 1963-64); minimum contents (since 1940), 10,695,000 acre-ft Apr. 26, 1956, gage height, 1,083.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 25,060,000 acre-ft July 7, gage height, 1,214.35 ft; minimum, 23,806,000 acre-ft May 4, gage height, 1,206.06 ft.

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24412	24187	24133	24070	23944	23894	23852	23816	24421	25045	24991	24824
2	24413	24189	24133	24061	23950	23903	23842	23815	24459	25043	24986	24839
3	24412	24187	24129	24048	23965	23919	23828	23812	24492	25042	24996	24842
4	24404	24189	24118	24034	23968	23918	23818	23822	24526	25042	25005	24838
5	24398	24186	24112	24033	23971	23916	23812	23839	24551	25039	24999	24830
6	24400	24175	24099	24013	23964	23921	23816	23848	24579	25041	24990	24836
7	24400	24166	24091	24001	23961	23925	23821	23855	24594	25060	24980	24853
8	24398	24154	24100	23983	23952	23925	23821	23864	24608	25057	24968	24865
9	24389	24148	24112	23974	23956	23935	23819	23861	24614	25040	24965	24861
10	24386	24151	24114	23968	23965	23944	23821	23876	24615	25040	24962	24853
11	24376	24160	24120	23956	23956	23937	23821	23894	24614	25043	24960	24855
12	24377	24163	24109	23953	23949	23928	23819	23904	24609	25040	24956	24858
13	24380	24157	24103	23961	23941	23915	23821	23918	24603	25051	24947	24858
14	24382	24159	24102	23949	23935	23907	23831	23915	24609	25056	24942	24871
15	24377	24153	24106	23937	23925	23898	23827	23910	24635	25048	24936	24884
16	24365	24150	24124	23931	23931	23904	23822	23910	24673	25036	24930	24885
17	24365	24150	24118	23924	23940	23921	23813	23910	24697	25031	24928	24878
18	24353	24156	24111	23916	23935	23922	23821	23915	24726	25048	24931	24879
19	24351	24153	24124	23924	23925	23916	23809	23961	24749	25048	24924	24878
20	24347	24145	24118	23935	23919	23918	23815	23995	24775	25043	24908	24865
21	24326	24136	24111	23932	23910	23910	23819	24034	24801	25057	24904	24871
22	24285	24156	24111	23925	23909	23901	23824	24070	24842	25053	24893	24879
23	24237	24157	24121	23918	23910	23907	23822	24102	24891	25043	24885	24871
24	24210	24163	24124	23913	23921	23903	23821	24136	24919	25036	24882	24871
25	24204	24169	24136	23913	23919	23891	23816	24168	24951	25023	24881	24865
26	24198	24160	24139	23919	23913	23865	23806	24211	24979	25008	24865	24858
27	24193	24150	24141	23932	23906	23859	23806	24252	24996	25019	24852	24853
28	24205	24141	24132	23931	23898	23862	23815	24279	25005	25022	24841	24867
29	24198	24138	24120	23935	---	23856	23816	24308	25029	25013	24827	24875
30	24192	24139	24102	23940	---	23855	23821	24345	25045	25006	24815	24875
31	24190	---	24081	23938	---	23861	---	24371	---	24999	24821	---
MAX	24413	24189	24141	24070	23971	23944	23852	24371	25045	25060	25005	24885
MIN	24190	24136	24081	23913	23898	23855	23806	23812	24421	24999	24815	24824
*	1208.63	1208.29	1207.90	1206.95	1206.68	1206.43	1206.16	1209.83	1214.25	1213.95	1212.79	1213.14
	-216000	-51000	-58000	-143000	-40000	-37000	-40000	+550000	+674000	-46000	-178000	+54000
	12840	9800	9530	10110	9460	11580	14100	16140	16920	18010	18360	15480
**	9.5	5.5	4.9	3.6	3.7	4.4	3.3	4.8	7.0	7.4	8.4	6.7
	119600	68300	61000	44200	46400	55300	40700	60200	88600	94300	107200	85500

CAL YR 1984 MAX 25000 MIN 23800 -670000 153470 ** 65.0 816600
WTR YR 1985 MAX 25060 MIN 23806 469000 162330 ** 69.2 871300

* Gage height, in feet, at end of month.
Change in contents, in acre-feet.
Diversions, in acre-feet.

** Gross evaporation, in inches, from Lake Mead.
Gross evaporation, in acre-feet, from Lake Mead.

NOTE.-- Figures of gross evaporation are based on data obtained on Lake Mead by the U.S. Bureau of Reclamation and at Las Vegas by National Weather Service, and are computed by the Geological Survey. Only the mass-transfer method described in Geological Survey Professional Paper 298 is used. "Gross" denotes the total evaporation from the lake without deduction for precipitation on the lake surface for natural losses that would have occurred in the area now occupied by the lake. Starting February 1976, coefficient to 0.00179.

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1940 to September 1962, October 1963 to current year.
CHEMICAL ANALYSES, SPECIFIC CONDUCTANCES, AND WATER TEMPERATURES: October 1940 to September 1962 and October 1963 to current year, monthly.

COOPERATION.--Samples and field data collected by U.S. Bureau of Reclamation. Non-nutrient samples analyzed by Metropolitan Water District of Southern California.

EXTREMES MEASURED FOR PERIOD OF RECORD (at 5-ft depth to September 1962; at water surface from October 1963 to current year).--
SPECIFIC CONDUCTANCES: Maximum, 1,250 microsiemens Oct. 4, Nov. 1, 1965; minimum, 688 microsiemens Nov. 1, 1957.
WATER TEMPERATURES: Maximum, 31.5°C Aug. 30, 1967; minimum, 11.0°C Jan. 28, 1949.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
NOV									
30...	0900	0.0	15.5	7.7	--	--	--	--	--
30...	0901	5.00	15.5	7.6	--	--	--	--	--
30...	0910	10.0	15.5	7.6	290	170	76	26	81
30...	0915	15.0	15.5	7.6	--	--	--	--	--
30...	0920	20.0	15.5	7.6	--	--	--	--	--
30...	0925	25.0	15.5	7.7	--	--	--	--	--
30...	0930	30.0	15.5	7.7	--	--	--	--	--
30...	0935	40.0	15.5	7.7	--	--	--	--	--
30...	0940	50.0	15.5	7.6	--	--	--	--	--
30...	0945	60.0	15.5	7.7	--	--	--	--	--
30...	0950	70.0	15.5	7.6	--	--	--	--	--
30...	0955	75.0	15.5	7.6	--	--	--	--	--
30...	1000	80.0	15.5	7.6	--	--	--	--	--
30...	1005	90.0	15.5	7.6	--	--	--	--	--
30...	1010	100	15.5	7.6	--	--	--	--	--
30...	1015	125	15.5	7.6	--	--	--	--	--
30...	1020	150	15.5	7.6	--	--	--	--	--
30...	1025	175	15.5	7.5	--	--	--	--	--
30...	1030	200	14.5	6.1	--	--	--	--	--
30...	1035	225	14.5	6.2	--	--	--	--	--
30...	1040	250	14.0	6.6	--	--	--	--	--
30...	1045	275	13.0	7.0	--	--	--	--	--
30...	1050	300	12.0	7.0	--	--	--	--	--
30...	1055	325	12.0	7.0	300	160	78	25	82
30...	1100	350	12.0	6.9	--	--	--	--	--
30...	1105	375	12.0	6.8	--	--	--	--	--
30...	1110	400	12.0	6.6	--	--	--	--	--
30...	1115	425	12.0	6.4	300	170	80	26	83
30...	1120	450	12.0	6.1	--	--	--	--	--
30...	1125	475	12.0	5.4	--	--	--	--	--

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
NOV								
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	2	3.9	250	61	0.36	8.3	580	0.79
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	61	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	61	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	61	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	61	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	62	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	62	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	2	3.8	250	65	0.36	8.3	590	0.8
30...	--	--	--	--	--	--	--	--
30...	--	--	--	65	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	2	3.9	260	65	0.36	8.3	600	0.82
30...	--	--	--	--	--	--	--	--
30...	--	--	--	61	--	--	--	--

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
NOV								
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
DEC									
28...	0900	0.0	14.0	8.2	--	--	--	--	--
28...	0910	10.0	14.0	8.2	--	--	--	--	--
28...	0925	25.0	14.0	8.2	--	--	--	--	--
28...	0955	75.0	14.0	8.2	--	--	--	--	--
28...	1015	125	14.0	8.2	--	--	--	--	--
28...	1025	175	14.0	8.1	--	--	--	--	--
28...	1035	225	14.0	8.1	--	--	--	--	--
28...	1045	275	13.5	7.2	--	--	--	--	--
28...	1055	325	12.0	6.6	--	--	--	--	--
28...	1105	375	12.0	6.6	--	--	--	--	--
28...	1115	425	11.5	6.1	--	--	--	--	--
28...	1125	475	11.5	4.8	--	--	--	--	--

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
DEC								
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
DEC								
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
JAN									
23...	1100	0.0	13.0	8.2	--	--	--	--	--
23...	1108	10.0	13.0	8.1	290	160	77	25	78
23...	1115	25.0	13.0	8.1	--	--	--	--	--
23...	1135	75.0	13.0	8.1	--	--	--	--	--
23...	1150	125	13.0	8.0	--	--	--	--	--
23...	1200	175	13.0	8.0	--	--	--	--	--
23...	1207	225	13.0	8.0	--	--	--	--	--
23...	1215	275	13.0	7.6	--	--	--	--	--
23...	1221	325	12.0	7.5	300	170	79	24	78
23...	1227	375	12.0	6.1	--	--	--	--	--
23...	1241	425	12.0	5.6	--	--	--	--	--
23...	1252	475	12.0	4.2	310	170	83	24	80
23...	1259	490	12.0	2.0	--	--	--	--	--
23...	1315	493	--	--	--	--	--	--	--

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
JAN								
23...	--	--	--	--	--	--	--	--
23...	2	3.5	240	59	0.32	9.0	570	0.77
23...	--	--	--	60	--	--	--	--
23...	--	--	--	60	--	--	--	--
23...	--	--	--	60	--	--	--	--
23...	--	--	--	60	--	--	--	--
23...	--	--	--	61	--	--	--	--
23...	--	--	--	62	--	--	--	--
23...	2	3.5	240	63	0.33	8.7	580	0.78
23...	--	--	--	64	--	--	--	--
23...	--	--	--	64	--	--	--	--
23...	2	3.5	250	65	0.33	9.3	600	0.81
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
JAN								
23...	--	--	--	--	--	--	--	--
23...	<0.01	0.30	0.05	0.35	0.4	0.7	3.1	<0.01
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	<0.01	0.40	0.03	0.77	0.8	1.2	5.3	0.07

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
MAR									
01...	1045	0.0	13.5	8.5	--	--	--	--	--
01...	1055	10.0	13.0	8.5	290	160	77	25	79
01...	1110	25.0	13.0	8.5	--	--	--	--	--
01...	1140	75.0	12.0	6.3	--	--	--	--	--
01...	1200	125	12.0	8.2	--	--	--	--	--
01...	1210	175	11.5	8.0	--	--	--	--	--
01...	1220	225	11.5	7.8	--	--	--	--	--
01...	1230	275	11.5	7.8	290	160	75	25	79
01...	1250	325	11.0	8.0	--	--	--	--	--
01...	1310	375	11.0	8.0	--	--	--	--	--
01...	1330	425	11.0	8.0	--	--	--	--	--
01...	1350	475	11.0	8.0	280	150	73	25	78
01...	1400	495	11.0	6.8	--	--	--	--	--

DATE	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)
MAR								
01...	--	--	--	--	--	--	--	--
01...	2	4.2	240	60	0.31	8.6	570	0.78
01...	--	--	--	60	--	--	--	--
01...	--	--	--	60	--	--	--	--
01...	--	--	--	60	--	--	--	--
01...	--	--	--	60	--	--	--	--
01...	--	--	--	59	--	--	--	--
01...	2	3.6	240	57	0.31	8.6	560	0.77
01...	--	--	--	--	--	--	--	--
01...	--	--	--	60	--	--	--	--
01...	--	--	--	60	--	--	--	--
01...	2	3.6	230	56	0.3	8.6	550	0.75
01...	--	--	--	--	--	--	--	--

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
MAR								
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
APR									
17...	1245	0.0	14.5	8.3	--	--	--	--	--
17...	1253	10.0	13.5	8.4	290	160	75	25	80
17...	1305	25.0	13.0	8.3	--	--	--	--	--
17...	1329	75.0	12.0	8.1	--	--	--	--	--
17...	1345	125	11.5	8.1	--	--	--	--	--
17...	1353	175	11.5	8.0	--	--	--	--	--
17...	1401	225	11.0	8.0	--	--	--	--	--
17...	1410	275	11.0	8.0	280	150	72	24	76
17...	1420	325	11.0	8.0	--	--	--	--	--
17...	1430	375	11.0	8.0	--	--	--	--	--
17...	1440	425	11.0	8.0	--	--	--	--	--
17...	1450	475	11.0	7.9	280	150	71	24	75
17...	1500	495	11.0	7.8	--	--	--	--	--

DATE	SODIUM AD-SORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)
APR								
17...	--	--	--	--	--	--	--	--
17...	2	3.2	240	60	0.32	8.4	570	0.78
17...	--	--	--	60	--	--	--	--
17...	--	--	--	59	--	--	--	--
17...	--	--	--	59	--	--	--	--
17...	--	--	--	59	--	--	--	--
17...	--	--	--	57	--	--	--	--
17...	2	3.2	230	57	0.32	8.3	550	0.74
17...	--	--	--	60	--	--	--	--
17...	--	--	--	56	--	--	--	--
17...	--	--	--	56	--	--	--	--
17...	2	3.2	230	56	0.31	8.4	540	0.74
17...	--	--	--	--	--	--	--	--

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
APR								
17...	--	--	--	--	--	--	--	--
17...	<0.01	0.30	0.03	0.47	0.5	0.8	3.5	0.01
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	<0.01	0.30	0.04	0.86	0.9	1.2	5.3	0.06

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
JUL									
24...	1050	0.0	27.0	8.9	--	--	--	--	--
24...	1113	10.0	27.0	8.9	--	--	--	--	--
24...	1203	25.0	27.0	9.2	320	210	68	36	80
24...	1221	75.0	16.0	6.5	--	--	--	--	--
24...	1230	125	14.0	7.5	--	--	--	--	--
24...	1236	175	13.0	8.4	--	--	--	--	--
24...	1240	225	12.0	8.6	--	--	--	--	--
24...	1244	275	11.5	8.6	280	150	73	24	75
24...	1248	325	11.5	8.6	--	--	--	--	--
24...	1251	375	11.0	8.6	--	--	--	--	--
24...	1256	425	11.0	8.5	--	--	--	--	--
24...	1307	475	11.0	8.4	280	150	72	24	74
24...	1315	500	11.0	7.7	--	--	--	--	--

< Actual value is known to be less than value shown.

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
JUL								
24...	--	--	--	--	--	--	--	--
24...	--	--	--	64	--	--	--	--
24...	2	3.6	250	63	0.26	8.7	580	0.79
24...	--	--	--	59	--	--	--	--
24...	--	--	--	57	--	--	--	--
24...	--	--	--	58	--	--	--	--
24...	--	--	--	57	--	--	--	--
24...	2	3.2	230	58	0.25	9.0	550	0.75
24...	--	--	--	--	--	--	--	--
24...	--	--	--	57	--	--	--	--
24...	--	--	--	57	--	--	--	--
24...	2	3.1	230	56	0.26	8.7	540	0.74
24...	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
JUL								
24...	--	--	--	--	--	--	--	--
24...	0.01	<0.10	0.05	0.35	0.4	--	--	<0.01
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	<0.01	0.30	0.04	0.36	0.4	0.7	3.1	0.02

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
SEP									
25...	0940	0.0	23.0	8.7	--	--	--	--	--
25...	0946	10.0	23.0	8.6	280	170	69	27	80
25...	0951	25.0	23.0	8.5	--	--	--	--	--
25...	0953	75.0	17.0	5.6	270	140	69	24	73
25...	0956	125	15.0	4.7	--	--	--	--	--
25...	0958	175	14.0	6.6	270	140	69	24	73
25...	1002	225	12.0	7.4	--	--	--	--	--
25...	1005	275	11.5	7.5	--	--	--	--	--
25...	1007	325	11.5	7.7	--	--	--	--	--
25...	1010	375	11.0	7.7	--	--	--	--	--
25...	1019	425	11.0	7.4	--	--	--	--	--
25...	1025	475	11.0	6.8	280	150	72	24	73
25...	1030	480	11.0	6.9	--	--	--	--	--

< Actual value is known to be less than value shown.

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
SEP								
25...	--	--	--	--	--	--	--	--
25...	2	3.7	250	64	0.27	8.9	560	0.77
25...	--	--	--	64	--	--	--	--
25...	2	3.0	210	55	0.21	8.9	520	0.71
25...	--	--	--	64	--	--	--	--
25...	2	3.0	210	55	0.24	8.9	520	0.71
25...	--	--	--	64	--	--	--	--
25...	--	--	--	63	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	55	--	--	--	--
25...	--	--	--	55	--	--	--	--
25...	2	3.2	220	55	0.25	9.1	530	0.73
25...	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
SEP								
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV
(National stream-quality accounting network station)

LOCATION.--Lat 36°00'55", long 114°44'16", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, or SW¼NE¼ sec.29, T.22 S., R.65 E., Mount Diablo meridian, Mohave-Clark Counties, Hydrologic Unit 15030101, in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--171,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year (prior to April 1934, monthly discharge only, published in WSP 1313). Published as "near Willow Beach" 1933-39 and as "below Boulder Dam" 1939-45.

GAGE.--Acoustical velocity meters on each turbine in Hoover Dam. Prior to Nov. 1, 1939, water-stage recorder at site 9 mi downstream at datum 594.8 ft, National Geodetic Vertical Datum of 1929. Nov. 1, 1939, to June 30, 1958, water-stage recorder at site 0.8 mi downstream at datum 600.35 ft above National Geodetic Vertical Datum of 1929. July 1, 1958, to Nov. 7, 1979, totalizing flowmeter on each turbine.

REMARKS.--Flow regulated by Lake Mead since Feb. 1, 1935. Many diversions above station for irrigation, industrial, and municipal use.

COOPERATION.--Records furnished by Bureau of Reclamation.

AVERAGE DISCHARGE.--51 years (water years 1935-85), 13,830 ft^3/s, 10,020,000 acre-ft/yr, unadjusted for storage in Lake Mead.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 50,800 ft^3/s July 29, 1983; no flow at Hoover Dam part of Feb. 10, 1935; minimum daily, 152 ft^3/s Feb. 10, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 36,600 ft^3/s Dec. 31; minimum daily, 13,900 ft^3/s Mar. 13, Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27500	27700	26300	34300	24200	28600	25000	23300	19800	29400	28000	20900
2	27500	27700	25100	35200	21200	19000	24300	22400	21200	30300	28100	18400
3	26000	22500	28000	34000	20900	19500	24400	22000	30000	28900	22000	26000
4	28300	23500	27700	34700	30200	28200	26100	17700	31300	29800	21800	25200
5	28100	27500	29000	28100	28500	27100	21500	15100	31600	30800	28900	25200
6	27500	29500	28100	24900	30400	26900	20100	22100	30800	24600	29500	24100
7	25700	29700	26200	35500	27800	27500	19100	21400	31200	23300	30300	16900
8	28800	28600	18100	34900	28900	28100	23000	22000	27400	32400	30200	16300
9	28400	29500	17600	33900	24700	19800	22400	23600	26300	31400	29600	23900
10	26000	23000	25400	30000	24900	16000	23000	20700	30200	31900	21400	23700
11	24700	19600	26400	32500	30600	25600	23900	18700	30100	27600	23200	20700
12	25900	23400	28000	24300	30600	27500	24100	18500	30700	29300	27600	22200
13	22500	26300	27900	22200	32600	27800	20500	24600	31300	22700	28900	22300
14	22000	25600	27100	33100	30900	24600	18600	24900	30400	23300	28100	15600
15	25800	26600	20100	31900	31700	26100	22900	26900	26300	28100	28300	13900
16	25100	28800	18700	31900	25300	18800	23500	26800	24300	30300	29000	21900
17	27600	25400	27200	28800	23100	17200	23600	25400	30800	30400	24800	22900
18	26400	22100	29600	29600	29400	22700	23000	21000	30700	28600	21700	23600
19	25600	27300	26800	18900	32200	23400	22600	19900	31400	29500	28600	23800
20	22300	28400	26300	19200	32300	22600	17400	24700	31000	28400	28800	26100
21	19500	29500	27400	29000	31400	23300	17500	25600	30700	20600	28800	20700
22	26400	21800	24900	29300	29900	21100	23900	25800	22900	29400	28400	19300
23	27300	22100	18500	29500	28300	17500	24300	26200	19900	29600	27700	25400
24	26800	24300	25200	27600	20300	16900	24500	26700	30100	30600	25800	24100
25	23800	20500	18300	26000	31400	24300	22400	24800	28500	29600	24600	24800
26	28300	27900	27600	23500	32200	24800	24300	18800	28300	31700	29700	22600
27	25800	30600	27800	21600	31500	23100	20900	21900	28700	22700	30000	23100
28	20500	27600	29800	24900	32300	22600	16800	26600	29100	23200	30100	15500
29	27900	25700	34700	24900	---	23000	23900	28100	22500	27900	31000	14800
30	26900	25500	35200	24300	---	19400	23200	29200	22000	29500	30300	21600
31	25500	---	36600	24800	---	13900	---	28600	---	28900	23900	---
TOTAL	800400	778200	815600	883300	797700	706900	670700	724000	839500	874700	849100	645500
MEAN	25820	25940	26310	28490	28490	22800	22360	23350	27980	28220	27390	21520
MAX	28800	30600	36600	35500	32600	28600	26100	29200	31600	32400	31000	26100
MIN	19500	19600	17600	18900	20300	13900	16800	15100	19800	20600	21400	13900
AC-FT	1588000	1544000	1618000	1752000	1582000	1402000	1330000	1436000	1665000	1735000	1684000	1280000

CAL YR 1984 TOTAL 10794800 MEAN 29490 MAX 37500 MIN 15600 AC-FT 21410000
WTR YR 1985 TOTAL 9385600 MEAN 25710 MAX 36600 MIN 13900 AC-FT 18620000

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1939 to current year.

CHEMICAL ANALYSES: October 1939 to September 1944, once daily (composited); October 1944 to July 1946 and November 1948 to July 1950, occasional (composited); October 1950 to September 1957, once daily (composited); October 1957 to September 1962, twice monthly (composited); October 1963 to September 1967, three times per month (composited); October 1967 to March 1970, once daily (composited); April 1970 to September 1981, monthly; October 1981 to current year, every 2 months.

SPECIFIC CONDUCTANCES: October 1939 to July 1957, once daily; August 1957 to September 1962 and October 1963 to March 1970, variable frequency of measurement; April 1970 to September 1977, monthly; October 1977 to current year, hourly.

BIOLOGICAL DATA: November 1974 to September 1977, monthly; October 1977 to September 1981, monthly (seasonal).

MICROBIOLOGICAL DATA: November 1974 to September 1981, monthly; October 1981 to current year, every 2 months.

WATER TEMPERATURES: October 1941 to July 1957, once daily; August 1957 to March 1970, variable frequency of measurement; April 1970 to September 1977, monthly; October 1977 to current year, hourly.

SEDIMENT DATA: August 1975 to September 1981, monthly; October 1981 to current year, every 2 months.

INSTRUMENTATION.--Specific-conductance and water-temperature recorder October 1977 to current year.

REMARKS.--Samples collected 0.3 mi downstream from gaging station in Hoover Dam powerhouse. Unpublished chemical analyses for period October 1939 to September 1940 available from the U.S. Geological Survey in Tucson, Ariz. Periods of no record for daily specific conductance and (or) water temperature are due to recorder malfunctions.

EXTREMES MEASURED FOR PERIOD OF RECORD SINCE OCTOBER 1970.--

SPECIFIC CONDUCTANCES: Maximum, 1,230 microsiemens Jan. 18, 1972; minimum, 875 microsiemens Sept. 15-16, 20-21, 1985.

PHYTOPLANKTON: Maximum, 3,800 cells/mL Nov. 5, 1974; minimum, 5 cells/mL Aug. 9, 1977.

FECAL STREPTOCOCCI: Maximum, 45 colonies/100 mL Mar. 9, 1977; minimum, <1 colony/100 mL several times during period of record.

WATER TEMPERATURES: Maximum, 21.5°C July 23, 1983; minimum, 9.0°C Feb. 12, 1975, and Jan. 10, 1978.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 24 mg/L July 7, 1982; minimum, <1 mg/L on several days in 1976, Oct. 16, 1979, several days in 1980, Sept. 16, 1981, and Mar. 9, 1982.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE DAILY).--

SPECIFIC CONDUCTANCES: Maximum, 920 microsiemens many days in Nov., Dec., Jan., and Feb.; minimum, 831 microsiemens Sept. 15-16, 20-21.

WATER TEMPERATURES: Maximum, 14.5°C many days in Oct., Nov., and Dec. 12-13; minimum, 11.5°C many days in Mar., Apr., May, June 1-2, and July 15.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV 1984												
14...	1415	E25600	900	8.00	19.0	14.0	1.0	750	6.8	67	18	<1
JAN 1985												
16...	1200	24800	900	8.10	12.0	13.0	0.4	755	8.6	83	20	<1
MAR												
11...	1100	24900	890	8.10	19.0	11.5	0.5	745	9.4	88	24	<1
MAY												
15...	0900	34000	890	8.10	21.0	12.0	0.8	741	9.0	86	<10	K1
JUL												
19...	1100	30700	870	8.00	28.0	12.0	0.7	746	8.2	78	<10	<1
SEP												
17...	1000	29300	840	8.00	28.0	13.0	0.5	740	9.2	90	10	<1

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV 1984												
14...	<1	290	160	73	25	78	2	3.7	130	230	61	0.3
JAN 1985												
16...	K4	300	180	76	26	79	2	3.5	118	230	64	0.3
MAR												
11...	K1	310	190	81	27	79	2	3.7	128	220	59	0.3
MAY												
15...	<1	300	170	76	26	77	2	4.0	130	230	59	0.3
JUL												
19...	<1	290	160	73	25	73	2	3.9	127	220	59	0.3
SEP												
17...	<1	270	150	67	24	71	2	3.8	122	220	57	0.3

E Estimated
K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

WATER QUALITY DATA

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS TOTAL (MG/L AS PO4) (71886)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 1984 14...	8.8	578	560	0.79	0.35	<0.01	0.3	<0.01	--	<0.01	<0.01
JAN 1985 16...	8.9	579	560	0.79	0.32	0.03	0.3	0.02	--	<0.01	<0.01
MAR 11...	9.1	575	560	0.78	0.32	0.02	0.5	<0.01	--	0.01	<0.01
MAY 15...	9.0	577	560	0.78	0.32	0.04	0.4	0.02	--	<0.01	<0.01
JUL 19...	8.9	562	540	0.76	0.32	0.02	0.3	<0.01	--	0.02	<0.01
SEP 17...	8.6	550	530	0.75	0.35	0.04	0.4	0.02	0.06	0.02	<0.01

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)
NOV 1984 14...	10	2	100	<0.5	<1	5	<3	2	<3	4	41
JAN 1985 16...	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	10	1	110	<0.5	<1	<1	<3	2	<3	3	46
MAY 15...	10	2	110	<0.5	<1	<1	<3	4	6	<1	41
JUL 19...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	<10	2	100	<0.5	<1	<1	<3	1	<3	<1	34

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
NOV 1984 14...	3	<0.1	<10	4	2	1	960	<6	7	1	--
JAN 1985 16...	--	--	--	--	--	--	--	--	--	2	134
MAR 11...	<1	--	<10	3	3	<1	1000	<6	5	1	67
MAY 15...	5	<0.1	<10	1	3	<1	980	<6	20	1	92
JUL 19...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	<1	<0.1	<10	2	3	<1	880	<6	10	<1	--

< Actual value is known to be less than value shown.

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	907	887	896	904	894	901	920	910	911	920	910	912
2	908	888	897	904	894	897	910	900	910	920	910	912
3	908	889	896	905	885	898	910	900	909	920	910	911
4	910	890	898	905	895	900	920	910	912	910	910	910
5	900	890	898	906	896	902	920	910	914	920	910	910
6	901	891	898	906	896	901	920	910	915	910	900	908
7	911	891	897	917	897	900	920	910	915	910	900	908
8	912	892	901	907	897	901	920	910	914	920	910	911
9	912	892	900	908	888	898	920	910	913	910	900	910
10	913	893	901	918	898	906	920	910	913	910	910	910
11	903	893	899	909	899	906	920	910	916	910	900	909
12	914	894	900	909	899	903	920	910	916	910	900	909
13	904	894	899	909	899	901	920	910	916	910	900	908
14	905	895	897	910	890	900	920	910	917	910	900	909
15	905	885	894	910	900	902	920	910	914	910	900	905
16	906	886	897	910	890	903	920	910	912	910	900	905
17	906	886	893	910	890	904	920	900	910	910	900	906
18	907	887	900	910	900	905	920	910	912	910	900	908
19	897	887	895	910	900	905	920	910	911	920	900	910
20	898	888	895	910	900	904	920	910	911	910	900	908
21	908	888	897	910	900	905	920	910	912	910	900	909
22	899	889	896	920	900	909	920	910	912	910	900	907
23	899	889	895	920	900	911	920	910	912	910	900	907
24	900	890	894	920	900	908	920	910	913	910	900	907
25	900	890	896	920	890	905	920	910	913	910	900	908
26	911	891	899	920	910	916	920	910	913	910	900	908
27	901	891	895	920	910	913	920	910	913	910	900	908
28	902	892	898	920	900	909	920	910	913	920	900	910
29	902	892	895	920	900	910	920	910	914	920	910	912
30	903	893	898	920	910	914	920	910	914	910	900	908
31	903	893	897	---	---	---	920	910	913	910	900	905
MONTH	914	885	897	920	885	905	920	900	913	920	900	909

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	910	900	907	900	890	894	890	870	880	890	880	883
2	910	900	909	900	890	895	880	870	876	900	880	885
3	920	900	909	900	880	893	890	870	880	900	880	891
4	920	900	911	900	890	896	890	870	881	900	880	893
5	910	900	907	900	900	900	890	880	884	900	880	891
6	920	900	910	900	890	896	890	880	882	890	880	885
7	920	900	910	900	890	895	890	870	883	900	880	887
8	920	900	911	900	890	893	890	880	884	890	880	885
9	920	910	913	900	890	896	890	880	884	900	880	890
10	910	910	910	910	890	898	890	870	882	900	870	886
11	910	900	905	910	890	895	890	870	880	900	880	890
12	910	900	903	900	890	893	890	870	880	890	880	888
13	910	900	903	900	890	894	890	870	883	900	870	883
14	910	900	904	900	890	895	890	880	881	890	870	883
15	910	900	904	900	880	891	890	870	882	900	880	888
16	910	900	903	900	890	891	900	880	887	900	880	891
17	910	900	901	890	880	890	910	870	889	900	890	893
18	910	900	902	900	880	890	900	870	883	890	880	888
19	910	900	903	900	880	889	890	870	881	900	880	890
20	910	900	905	890	880	885	900	870	890	900	880	893
21	910	900	901	890	880	887	890	860	875	900	880	893
22	910	900	901	900	880	889	890	870	880	890	880	888
23	910	900	903	900	880	887	900	880	885	900	880	889
24	910	900	902	890	880	888	890	870	882	900	880	891
25	910	900	904	900	880	886	890	870	882	900	890	893
26	910	900	901	900	870	884	890	870	878	900	880	894
27	900	890	898	900	860	884	890	870	883	900	880	890
28	900	890	897	900	860	879	900	880	888	900	880	891
29	---	---	---	900	860	878	900	870	887	900	880	891
30	---	---	---	900	880	891	900	870	884	900	880	888
31	---	---	---	900	870	884	---	---	---	900	880	888
MONTH	920	890	905	910	860	891	910	860	883	900	870	889

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	900	880	886	890	880	889	885	875	880	859	849	858
2	900	880	888	890	880	888	886	876	881	858	848	855
3	890	880	886	890	880	885	886	876	881	858	848	853
4	900	880	888	890	880	885	887	877	881	857	837	853
5	890	890	890	890	880	884	887	877	880	857	847	853
6	900	880	891	890	880	883	887	877	881	856	836	848
7	900	880	892	890	880	882	888	878	880	856	846	850
8	900	880	894	890	880	883	888	868	878	865	835	852
9	900	890	892	890	880	884	889	869	880	854	844	849
10	900	890	892	890	880	883	889	879	879	854	834	845
11	900	890	893	890	880	883	890	880	881	853	833	845
12	900	880	891	890	880	881	880	870	879	853	843	845
13	900	880	891	880	870	878	879	869	876	852	832	844
14	900	880	891	880	870	879	879	869	877	852	832	844
15	900	890	891	880	870	876	878	868	873	851	831	843
16	900	890	890	880	870	877	878	868	875	851	831	843
17	900	890	892	880	870	877	877	867	874	850	840	849
18	900	890	890	880	860	872	877	867	871	860	840	845
19	890	880	890	880	870	873	876	866	868	841	841	841
20	900	880	890	880	870	875	876	866	869	841	831	841
21	890	890	890	881	871	874	875	865	869	851	831	841
22	890	880	887	881	871	878	874	864	869	852	842	844
23	890	880	885	882	872	879	874	864	869	852	832	844
24	890	880	885	882	872	880	873	863	868	852	832	845
25	890	870	880	883	873	881	873	863	867	863	843	848
26	890	880	884	883	873	880	872	862	864	853	833	846
27	890	880	885	883	873	877	872	852	861	854	844	849
28	890	880	888	884	874	877	861	851	860	854	834	846
29	890	880	886	884	874	876	861	851	858	854	834	844
30	900	880	888	885	875	878	860	850	855	855	835	846
31	---	---	---	885	875	878	859	849	856	---	---	---
MONTH	900	870	889	890	860	880	890	849	872	865	831	847

YEAR MAXIMUM 920 MINIMUM 831 MEAN 890

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	13.5	14.0	14.0	14.0	14.0	14.0	14.0	14.0	13.5	13.5	13.5
2	14.0	13.5	13.5	14.0	14.0	14.0	14.0	14.0	14.0	13.5	13.5	13.5
3	14.0	13.5	14.0	14.5	14.0	14.0	14.0	14.0	14.0	13.5	13.5	13.5
4	14.0	13.5	14.0	14.0	14.0	14.0	14.0	14.0	14.0	13.5	13.5	13.5
5	14.0	13.5	14.0	14.0	14.0	14.0	14.0	14.0	14.0	13.5	13.5	13.5
6	14.0	13.5	14.0	14.0	14.0	14.0	14.0	14.0	14.0	13.5	13.5	13.5
7	14.0	13.5	14.0	14.0	14.0	14.0	14.0	14.0	14.0	13.5	13.0	13.5
8	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	13.0	13.0	13.0
9	14.0	14.0	14.0	14.5	14.0	14.0	14.0	14.0	14.0	13.0	13.0	13.0
10	14.0	13.5	14.0	14.5	14.0	14.0	14.0	14.0	14.0	13.0	13.0	13.0
11	14.0	13.5	14.0	14.0	14.0	14.0	14.0	14.0	14.0	13.0	13.0	13.0
12	14.0	13.5	14.0	14.5	14.0	14.0	14.5	14.0	14.0	13.0	13.0	13.0
13	14.0	13.5	14.0	14.5	14.0	14.0	14.5	14.0	14.5	13.0	13.0	13.0
14	14.0	13.5	14.0	14.5	14.0	14.0	14.0	14.0	14.0	13.0	13.0	13.0
15	14.0	13.5	14.0	14.5	14.0	14.0	14.0	13.5	14.0	13.0	13.0	13.0
16	14.0	13.5	14.0	14.5	14.0	14.0	14.0	13.5	13.5	13.0	13.0	13.0
17	14.5	13.5	14.0	14.5	14.0	14.0	14.0	14.0	14.0	13.0	13.0	13.0
18	14.0	13.5	14.0	14.5	14.0	14.0	14.0	14.0	14.0	13.0	13.0	13.0
19	14.0	14.0	14.0	14.5	14.0	14.5	14.0	14.0	14.0	13.0	12.5	13.0
20	14.0	14.0	14.0	14.5	14.0	14.5	14.0	14.0	14.0	13.0	12.5	13.0
21	14.0	13.5	14.0	14.5	14.0	14.5	14.0	14.0	14.0	13.0	12.5	13.0
22	14.0	14.0	14.0	14.5	14.0	14.0	14.0	14.0	14.0	13.0	12.5	13.0
23	14.5	14.0	14.0	14.5	14.0	14.0	14.0	13.5	14.0	13.0	12.5	13.0
24	14.0	14.0	14.0	14.5	13.5	14.0	14.0	13.5	14.0	13.0	12.5	13.0
25	14.5	14.0	14.0	14.5	14.0	14.5	14.0	13.5	14.0	13.0	12.5	13.0
26	14.0	14.0	14.0	14.5	14.0	14.5	14.0	13.5	13.5	13.0	12.5	12.5
27	14.5	14.0	14.0	14.5	14.0	14.5	13.5	13.5	13.5	13.0	12.5	12.5
28	14.0	14.0	14.0	14.5	14.0	14.0	13.5	13.5	13.5	12.5	12.5	12.5
29	14.5	14.0	14.0	14.5	14.0	14.0	13.5	13.5	13.5	12.5	12.5	12.5
30	14.0	14.0	14.0	14.0	14.0	14.0	13.5	13.5	13.5	12.5	12.5	12.5
31	14.5	14.0	14.0	---	---	---	13.5	13.5	13.5	12.5	12.5	12.5
MONTH	14.5	13.5	14.0	14.5	13.5	14.0	14.5	13.5	14.0	13.5	12.5	13.0

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.5	12.5	12.5	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	11.5
2	12.5	12.5	12.5	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	11.5
3	12.5	12.5	12.5	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	12.0
4	12.5	12.5	12.5	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	12.0
5	12.5	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	12.0
6	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	11.5
7	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	12.0
8	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	12.0
9	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	12.0
10	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	12.0
11	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	12.0	12.0
12	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	12.0	12.0
13	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	12.0
14	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	11.5
15	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	12.0
16	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	12.0
17	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	12.0	12.5	11.5	12.0
18	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5	12.0	11.5	11.5
19	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5	12.0	11.5	12.0
20	12.0	12.0	12.0	12.0	11.5	11.5	12.5	11.5	12.0	12.0	12.0	12.0
21	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5	12.5	11.5	12.0
22	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5	12.0	11.5	12.0
23	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	12.0	12.0	12.0	12.0
24	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	11.5	12.0	12.0	12.0
25	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5	12.0	12.0	12.0
26	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5	12.0	11.5	12.0
27	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5	12.0	12.0	12.0
28	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	12.0	12.0	12.0	12.0
29	---	---	---	12.0	11.5	11.5	12.5	11.5	12.0	12.0	11.5	12.0
30	---	---	---	12.0	12.0	12.0	12.5	11.5	12.0	12.5	11.5	12.0
31	---	---	---	12.0	11.5	12.0	---	---	---	12.0	11.5	12.0
MONTH	12.5	12.0	12.0	12.0	11.5	12.0	12.5	11.5	11.5	12.5	11.5	12.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.0	11.5	12.0	12.0	12.0	12.0	12.5	12.0	12.5	13.0	12.0	12.5
2	12.0	11.5	12.0	12.0	12.0	12.0	12.5	12.0	12.5	13.0	12.5	12.5
3	12.0	12.0	12.0	12.0	12.0	12.0	12.5	12.0	12.5	13.0	12.5	12.5
4	12.0	11.5	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.0	12.5
5	12.0	12.0	12.0	12.0	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
6	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
7	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.0	12.5	13.0	12.5	12.5
8	12.0	12.0	12.0	12.0	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
9	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.0	12.5	13.0	12.5	12.5
10	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.0	12.5
11	12.0	12.0	12.0	12.5	12.0	12.0	13.0	12.0	12.5	13.0	12.5	12.5
12	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.0	12.5	13.0	12.5	12.5
13	12.5	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.5	12.5
14	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.5	12.5
15	12.0	12.0	12.0	12.5	11.5	12.0	12.5	12.5	12.5	13.0	12.5	12.5
16	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.5	12.5
17	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.5	12.5
18	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.5	12.5
19	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.5	12.5
20	12.5	12.0	12.0	12.5	12.0	12.5	13.0	12.0	12.5	13.0	12.5	12.5
21	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.5	12.5
22	12.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5	13.0	12.5	12.5
23	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.5	13.0
24	12.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5	13.0	12.5	12.5
25	12.0	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5	13.0	12.5	13.0
26	12.5	12.0	12.0	12.5	12.0	12.0	13.0	12.0	12.5	13.0	12.5	13.0
27	12.0	12.0	12.0	12.5	12.0	12.5	13.0	12.0	12.5	13.0	12.5	13.0
28	12.5	12.0	12.0	12.5	12.0	12.5	13.0	12.5	12.5	13.0	12.5	12.5
29	12.0	12.0	12.0	12.5	12.0	12.0	12.5	12.5	12.5	13.0	12.5	12.5
30	12.0	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5	13.0	12.5	13.0
31	---	---	---	12.5	12.0	12.5	13.0	12.5	12.5	---	---	---
MONTH	12.5	11.5	12.0	12.5	11.5	12.0	13.0	12.0	12.5	13.0	12.0	12.5
YEAR	14.5	11.5	12.5									

09422500 LAKE MOHAVE AT DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'50", long 114°34'07", in SW¼SW¼ sec.18, T.21 N., R.21 W., Gila and Salt River meridian, Mohave County, Hydrologic Unit 15030101, on forebay structure on Arizona side of Davis Dam on Colorado River, 29 mi west of Kingman, Ariz., and 67 mi downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--January 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill and rockfill dam; dam completed in April 1949 and storage began Jan. 17, 1950. Usable capacity, 1,810,000 acre-ft between elevations 533.39 ft - lowest point of penstock outlet - and 647.0 ft - top of spillway gates. A small amount of additional storage is available through use of splashboards on the spillway gates. Dead storage, 8,530 acre-ft below elevation 533.39 ft. Lake is used for power development, reregulation for irrigation demand, and to satisfy requirements of the Treaty of 1944 with Mexico. Figures given herein represent usable contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,811,000 acre-ft May 24, 1958, May 29, 1963, May 29, 1982; maximum elevation, 647.04 ft May 29, 1963, May 29, 1982; minimum contents (since 1952), 1,168,000 acre-ft Sept. 8, 1953, elevation, 622.15 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,796,000 acre-ft Apr. 9, elevation, 646.50 ft; minimum, 1,437,000 acre-ft Dec. 17, elevation, 633.12 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

633	1,434,000	641	1,644,000
635	1,486,000	644	1,726,000
638	1,564,000	647	1,810,000

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1578000	1542000	1491000	1523000	1704000	1733000	1742000	1766000	1675000	1726000	1742000	1699000
2	1577000	1542000	1489000	1539000	1694000	1717000	1750000	1766000	1663000	1731000	1743000	1680000
3	1574000	1536000	1491000	1582000	1681000	1706000	1761000	1769000	1665000	1733000	1732000	1676000
4	1576000	1530000	1491000	1572000	1688000	1706000	1773000	1765000	1671000	1738000	1721000	1673000
5	1580000	1531000	1497000	1577000	1687000	1712000	1777000	1754000	1678000	1744000	1720000	1671000
6	1581000	1534000	1499000	1592000	1689000	1718000	1778000	1756000	1686000	1741000	1724000	1663000
7	1579000	1538000	1498000	1612000	1689000	1727000	1780000	1756000	1692000	1733000	1728000	1645000
8	1583000	1542000	1484000	1632000	1687000	1738000	1787000	1757000	1693000	1738000	1732000	1626000
9	1586000	1546000	1466000	1648000	1683000	1733000	1792000	1760000	1692000	1747000	1737000	1618000
10	1585000	1541000	1465000	1659000	1678000	1722000	1789000	1758000	1697000	1756000	1728000	1614000
11	1582000	1529000	1464000	1672000	1680000	1725000	1789000	1753000	1702000	1755000	1719000	1606000
12	1580000	1523000	1470000	1676000	1686000	1734000	1790000	1749000	1707000	1756000	1718000	1601000
13	1571000	1523000	1470000	1670000	1694000	1744000	1784000	1751000	1716000	1746000	1719000	1593000
14	1564000	1520000	1471000	1681000	1699000	1744000	1773000	1750000	1722000	1738000	1719000	1574000
15	1562000	1519000	1456000	1695000	1705000	1750000	1771000	1756000	1720000	1738000	1719000	1551000
16	1554000	1523000	1444000	1705000	1702000	1744000	1770000	1758000	1716000	1742000	1721000	1544000
17	1569000	1520000	1445000	1711000	1695000	1733000	1770000	1756000	1719000	1745000	1716000	1538000
18	1578000	1512000	1451000	1720000	1695000	1733000	1767000	1745000	1725000	1752000	1706000	1534000
19	1580000	1512000	1460000	1713000	1700000	1731000	1763000	1731000	1734000	1752000	1706000	1538000
20	1572000	1515000	1468000	1704000	1710000	1731000	1752000	1728000	1742000	1754000	1707000	1548000
21	1559000	1518000	1472000	1711000	1717000	1733000	1740000	1725000	1747000	1740000	1709000	1548000
22	1559000	1511000	1475000	1718000	1718000	1727000	1745000	1723000	1741000	1742000	1709000	1546000
23	1560000	1503000	1464000	1726000	1719000	1714000	1754000	1720000	1726000	1745000	1709000	1554000
24	1561000	1498000	1460000	1730000	1707000	1703000	1760000	1718000	1733000	1749000	1704000	1559000
25	1554000	1486000	1445000	1733000	1711000	1709000	1767000	1716000	1738000	1752000	1699000	1567000
26	1552000	1488000	1447000	1730000	1719000	1717000	1765000	1700000	1740000	1759000	1700000	1571000
27	1552000	1494000	1452000	1722000	1726000	1724000	1763000	1690000	1740000	1748000	1704000	1576000
28	1540000	1498000	1457000	1721000	1732000	1732000	1756000	1688000	1741000	1740000	1707000	1567000
29	1543000	1496000	1472000	1718000	---	1738000	1760000	1689000	1734000	1740000	1712000	1557000
30	1543000	1492000	1489000	1717000	---	1738000	1763000	1690000	1724000	1743000	1716000	1562000
31	1540000	---	1508000	1715000	---	1733000	---	1689000	---	1743000	1709000	---
MAX	1586000	1546000	1508000	1733000	1732000	1750000	1792000	1769000	1747000	1759000	1743000	1699000
MIN	1540000	1486000	1444000	1523000	1678000	1703000	1740000	1688000	1663000	1726000	1699000	1534000
(*)	637 9	635.15	635.80	643.60	644.18	644.23	645.40	642.65	643.98	644.69	643.45	637.93
(**)	-44000	-48000	+16000	+207000	+17000	+1000	+30000	-74000	+35000	+19000	-34000	-147000

CAL YR 1984 MAX 1753000 MIN 1444000 (**) -151000
WTR YR 1985 MAX 1792000 MIN 1444000 (**) -22000

* Elevation, in feet, at end of month.
** Change in contents, in acre-feet

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'30", long 114°34'17", in SE¼NE¼ sec.1, T.32 S., R.66 E., Mount Diablo meridian, in Nevada, Clark County, Hydrologic Unit 15030101, on right bank 0.5 mi downstream from Davis Dam, 29 mi west of Kingman, Ariz., and 68 mi downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1905 to September 1907 (published as "at Hardyville"), March 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 490.00 ft, National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD since Oct. 1, 1967. 1905-7, nonrecording gage at site 4.8 mi downstream at datum about 3.4 ft lower. Mar. 16 to May 3, 1949, water-stage recorder at site 0.5 mi downstream at datum 10.00 ft higher. May 4, 1949, to Feb. 24, 1956, water-stage recorder at site 400 ft upstream at datum 10.00 ft higher. Feb. 25, 1956, to Sept. 30, 1967, water-stage recorder at present site at datum 10.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950. Many diversions upstream for irrigation, industrial, and municipal uses.

EXTREMES FOR PERIOD OF RECORD.--1905-7: Maximum daily discharge, 116,000 ft^3/s June 20, 1906; minimum daily, 2,850 ft^3/s Jan. 5, 1906.

1949-85: Maximum discharge, 46,200 ft^3/s July 2, 1983, elevation, 509.48 ft, maximum elevation, 513.91 ft Apr. 22, 1952; no flow at Davis Dam parts of several days July to September 1950 and Dec. 27, 1950, when gates in dam were closed; minimum daily discharge, 285 ft^3/s Aug. 3, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,300 ft^3/s May 29, elevation, 505.91 ft; minimum daily, 19,000 ft^3/s Apr. 2-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26900	27100	27200	26200	27200	27900	19100	21900	28500	27600	28400	28100
2	26300	27200	27200	25500	28000	27900	19000	21900	28500	27700	28200	28000
3	26100	27100	27200	25200	28000	27700	19000	21900	28600	27600	28000	27500
4	26200	27100	27200	25100	28000	26500	19000	21900	28000	27600	28000	27000
5	26200	27100	27300	25100	28000	23900	19000	21800	27800	27600	28000	27000
6	26200	27100	27200	25200	28300	22800	19000	21900	27800	27600	28000	27000
7	26100	27200	27300	25100	28300	22800	19000	21900	27800	27600	28100	27000
8	26000	27100	27300	25000	28000	22800	19000	21900	27700	27600	28100	27100
9	26100	26500	27200	24900	28100	22700	20700	21900	27600	27500	28000	27300
10	26100	26500	26800	24800	28000	22700	24100	21900	27800	27600	28100	26300
11	26100	26500	26600	24700	28100	22800	24100	21900	27800	28000	28100	25600
12	26100	26500	26600	24200	28100	22800	24000	21900	27700	28200	28100	25600
13	26000	26900	26500	24300	27900	23100	24000	23100	27700	28200	28100	25600
14	26000	27000	26600	24700	27900	23300	24100	24300	27600	28200	28100	25600
15	26000	26900	26700	25000	28000	23300	24200	24300	27600	28300	28100	25800
16	26100	26900	26800	25000	28100	23300	24200	26300	27500	28400	28100	25800
17	22000	27000	26700	25000	28000	23300	24200	27400	27500	28300	28100	25800
18	19300	26900	27000	24800	28000	23400	24200	27400	27500	28300	28200	25900
19	23400	26900	23700	24100	28100	23400	24200	27400	27500	28300	28200	22300
20	25900	26900	21200	24100	28200	23300	24200	27500	27400	28200	28300	20500
21	25900	27000	23400	24700	28100	23300	24200	27500	27300	28200	28300	20400
22	26000	27000	26200	24900	28100	23300	21000	27500	27300	28200	28200	20400
23	26000	27000	26200	25100	27900	23300	19900	27400	27200	28400	28100	20200
24	26100	27100	26300	25600	27900	23300	21500	27600	26200	28400	28100	20200
25	26100	27100	26400	25500	28000	21300	21700	27500	26400	28300	28100	20200
26	26200	27100	26600	25500	27900	19300	21700	27500	27600	28300	28300	20100
27	26200	27200	26700	25500	27900	19300	21700	27600	27600	28200	28300	20100
28	26200	27200	26700	25700	27900	19200	21800	28100	27600	28300	28200	20200
29	26200	27200	26800	25700	---	19100	21700	29000	27600	28400	28200	20100
30	26200	27200	26600	25700	---	19100	21700	28700	27500	28400	28200	20100
31	26200	---	26400	25700	---	19100	---	28500	---	28400	28200	---
TOTAL	796400	809500	818600	777600	784000	709300	655200	777300	828200	869900	872500	722800
MEAN	25690	26980	26410	25080	28000	22880	21840	25070	27610	28060	28150	24090
MAX	26900	27200	27300	26200	28300	27900	24200	29000	28600	28400	28400	28100
MIN	19300	26500	21200	24100	27200	19100	19000	21800	26200	27500	28000	20100
AC-FT	1580000	1606000	1624000	1542000	1555000	1407000	1300000	1542000	1643000	1725000	1731000	1434000

CAL YR 1984 TOTAL 10919000 MEAN 29830 MAX 35900 MIN 19300 AC-FT 21658000
WTR YR 1985 TOTAL 9421300 MEAN 25810 MAX 29000 MIN 19000 AC-FT 18687000

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

PERIOD OF WATER QUALITY RECORD.--July 1969 to August 1985 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1982 to current year.
WATER TEMPERATURE: October 1982 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,180 microsiemens Apr. 3, 1983; minimum recorded, 800 microsiemens June 30, 1985.
WATER TEMPERATURE: Maximum recorded, 23.5°C July 31, Aug. 1, 7, 11-13, 17, 1983; minimum recorded, 10.5°C on many days in December 1982, January, and February 1983.

EXTREMES FOR CURRENT PERIOD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 990 microsiemens May 2; minimum recorded, 800 microsiemens Sept. 29.
WATER TEMPERATURE: Maximum recorded, 20.5°C Sept. 26; minimum recorded 11.0°C Jan. 14, 15, 17, 18.

INSTRUMENTATION.--Specific conductance and water temperature recorder October 1982 to current year.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
OCT 1984											
15...	1130	26500	920	8.30	29.0	18.0	771	8.4	88	280	150
NOV											
27...	1100	27200	940	8.10	17.0	14.5	755	9.1	90	--	--
DEC											
18...	1200	27100	920	8.30	14.0	12.5	755	9.9	94	290	170
JAN 1985											
23...	1030	24800	940	8.20	15.5	15.0	--	10.6	--	300	180
FEB											
21...	1030	27600	930	8.20	15.0	12.0	755	10.5	99	300	170
MAR											
20...	1330	23300	920	8.10	24.0	13.5	755	10.3	100	300	180
APR											
16...	1100	23900	930	8.10	34.5	15.0	760	10.1	101	290	170
MAY											
16...	1300	27200	920	7.90	32.0	16.0	752	9.8	101	300	170
JUN											
12...	0945	27500	900	7.70	39.0	17.0	751	9.4	99	290	160
JUL											
17...	1000	28300	900	8.20	34.0	17.0	750	9.0	95	280	150
AUG											
22...	1000	28200	880	7.80	31.0	18.0	753	8.1	87	290	160

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 1984										
15...	71	26	85	2	4.0	--	--	--	250	67
NOV										
27...	--	--	--	--	--	148	0	121	--	--
DEC										
18...	75	26	79	2	3.8	152	0	125	240	64
JAN 1985										
23...	79	26	79	2	3.7	148	0	121	250	63
FEB										
21...	76	26	79	2	4.2	152	0	125	240	62
MAR										
20...	77	27	81	2	3.9	149	0	122	240	62
APR										
16...	74	26	80	2	4.0	148	0	121	240	63
MAY										
16...	76	26	79	2	4.0	149	0	122	230	63
JUN										
12...	73	26	78	2	3.8	156	0	128	230	64
JUL										
17...	72	25	76	2	4.0	167	0	137	230	62
AUG										
22...	73	25	76	2	3.8	152	0	125	230	60

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV--Continued

WATER QUALITY DATA

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1984										
15...	0.3	8.2	609	590	0.83	0.24	110	<3	--	--
NOV										
27...	--	--	--	--	--	--	--	--	1	92
DEC										
18...	0.3	8.5	574	570	0.78	0.30	140	4	2	146
JAN 1985										
23...	0.3	8.0	574	560	0.78	0.29	100	7	1	87
FEB										
21...	0.3	8.6	589	570	0.8	0.29	130	4	1	104
MAR										
20...	0.3	8.6	580	570	0.79	0.28	120	<3	--	--
APR										
16...	0.3	8.5	590	570	0.8	0.26	110	3	1	90
MAY										
16...	0.3	8.5	570	560	0.78	0.26	110	4	--	--
JUN										
12...	0.3	8.7	568	560	0.77	0.25	100	3	--	--
JUL										
17...	0.3	8.7	580	560	0.79	0.28	100	4	--	--
AUG										
22...	0.3	8.9	569	550	0.77	0.24	110	<3	--	--

< Actual value is known to be less than value shown.

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	941	921	930	938	903	930	936	926	931	932	922	929
2	940	920	935	938	918	928	935	925	930	933	923	931
3	939	939	939	939	929	931	934	924	927	934	924	931
4	938	918	936	939	929	932	933	923	926	935	925	933
5	938	928	933	940	910	935	932	922	926	936	926	934
6	937	917	930	940	920	933	931	921	923	936	926	934
7	936	916	931	941	901	920	930	920	922	937	927	935
8	935	885	930	941	921	931	929	919	919	938	928	935
9	935	885	928	942	932	937	928	918	921	939	929	938
10	934	894	919	942	932	930	928	918	919	940	930	939
11	933	913	920	942	922	932	927	917	917	940	930	939
12	922	912	919	943	913	934	926	916	917	939	929	938
13	931	911	924	943	933	934	925	915	917	939	929	938
14	931	911	922	934	924	934	924	914	917	939	929	939
15	930	920	925	934	924	932	923	913	916	939	929	939
16	940	920	932	935	905	920	922	912	914	938	928	937
17	941	931	933	935	905	929	921	911	912	938	928	938
18	941	921	936	936	926	931	920	910	913	938	938	938
19	942	932	936	936	926	932	921	911	915	948	938	938
20	942	902	933	937	927	930	922	912	917	938	928	937
21	943	933	934	937	927	932	923	913	918	937	927	936
22	943	933	936	938	928	934	923	913	916	937	927	936
23	944	934	936	938	928	931	924	914	917	937	927	936
24	944	924	934	939	929	934	925	915	920	937	927	937
25	935	925	934	939	929	931	926	916	919	936	926	935
26	935	925	933	939	929	933	927	917	922	936	926	935
27	935	925	934	940	930	936	928	918	923	936	926	935
28	946	936	936	939	929	934	929	919	924	936	926	930
29	936	926	931	938	928	932	929	919	924	935	925	933
30	937	917	932	937	927	932	930	920	925	935	905	929
31	937	917	929	---	---	---	931	921	928	935	925	935
MONTH	946	885	931	943	901	931	936	910	920	948	905	935

YEAR MAXIMUM 990 MINIMUM 800 MEAN 916

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	935	925	935	940	920	930	934	924	933	930	890	920
2	934	924	934	930	920	930	935	925	934	990	880	920
3	934	924	933	940	920	930	935	925	930	930	910	921
4	934	924	931	940	920	929	935	915	930	930	910	919
5	934	924	932	930	910	928	936	916	930	920	890	915
6	934	924	933	940	910	930	936	916	930	920	900	911
7	933	923	931	940	920	930	937	927	932	920	900	913
8	933	923	931	930	920	930	937	917	932	920	900	912
9	933	913	930	930	900	925	937	907	920	920	910	915
10	933	923	931	930	920	930	938	908	920	920	910	917
11	932	922	930	930	860	914	928	918	925	920	870	906
12	932	922	930	940	860	912	928	908	918	920	900	914
13	932	922	930	930	930	930	939	919	929	920	860	910
14	932	922	931	930	920	930	939	919	929	930	890	918
15	931	921	929	940	890	925	930	880	925	930	900	920
16	931	911	920	930	920	927	930	920	923	920	890	913
17	931	921	930	930	920	925	930	910	925	919	889	915
18	931	921	928	930	910	920	930	920	925	918	898	910
19	930	910	928	930	890	925	930	900	921	918	888	914
20	930	920	929	930	920	925	930	890	913	917	887	911
21	940	920	929	930	920	929	930	910	920	916	886	912
22	930	930	930	931	921	929	930	890	918	915	895	910
23	930	930	930	931	901	920	930	910	922	925	895	913
24	930	910	927	931	901	924	930	890	915	914	874	902
25	940	930	931	932	882	922	930	910	925	913	883	904
26	930	920	928	932	862	920	930	900	921	913	903	910
27	930	920	928	933	923	926	930	920	924	912	882	902
28	930	920	929	933	903	923	930	920	925	911	881	900
29	---	---	---	933	923	933	930	910	920	910	850	878
30	---	---	---	934	924	932	930	900	918	910	890	901
31	---	---	---	934	924	932	---	---	---	909	899	906
MONTH	940	910	930	940	860	926	939	880	924	990	850	911

YEAR MAXIMUM 990 MINIMUM 800 MEAN 916

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	908	888	906	901	831	891	910	880	903	907	887	896
2	907	897	902	901	871	894	910	880	900	898	888	896
3	907	847	880	902	802	890	910	870	902	910	890	895
4	906	896	905	892	872	891	910	890	901	910	900	905
5	905	875	901	893	833	886	910	870	898	920	900	904
6	904	884	890	894	884	889	910	890	900	910	900	903
7	904	874	892	894	814	888	910	880	896	910	900	905
8	913	893	902	905	885	896	900	890	892	910	900	904
9	902	892	895	895	885	893	900	870	891	910	900	902
10	901	891	894	896	886	894	900	880	892	910	900	903
11	901	891	897	896	886	894	900	870	891	910	900	900
12	900	860	896	897	847	891	890	880	886	910	900	902
13	900	880	894	908	878	894	900	870	885	910	900	904
14	901	891	896	898	888	897	900	870	888	910	890	905
15	902	892	897	899	889	897	900	880	888	910	900	904
16	902	892	895	899	889	895	900	880	885	910	890	900
17	903	893	897	920	890	907	890	870	883	910	880	900
18	903	893	896	920	870	902	890	870	885	900	890	897
19	904	884	894	920	910	916	890	870	881	900	880	897
20	894	884	890	920	910	918	890	840	870	910	860	900
21	895	875	891	920	910	916	880	860	875	910	860	903
22	896	886	895	920	880	911	880	870	876	910	890	901
23	896	886	892	920	900	912	892	872	883	910	900	904
24	897	827	881	920	880	911	893	883	890	910	860	897
25	897	827	885	920	870	904	895	875	885	910	900	901
26	898	888	893	920	890	910	897	877	890	910	840	891
27	898	828	889	920	890	912	898	878	889	900	880	888
28	899	879	894	920	910	913	900	870	890	900	880	894
29	900	890	892	910	910	910	902	872	889	900	840	880
30	900	800	882	910	880	903	903	873	895	900	860	882
31	---	---	---	910	890	903	895	885	892	---	---	---
MONTH	913	800	894	920	802	901	910	840	889	920	840	899

YEAR MAXIMUM 990 MINIMUM 800 MEAN 916

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	16.0	16.5	16.0	15.5	15.5	14.0	13.5	14.0	12.0	11.5	11.5
2	18.0	16.0	17.0	16.0	15.5	16.0	14.0	13.5	14.0	11.5	11.5	11.5
3	19.0	17.5	18.5	16.0	15.5	15.5	14.0	13.5	13.5	11.5	11.5	11.5
4	18.5	11.5	16.5	16.0	15.5	15.5	13.5	13.5	13.5	11.5	11.5	11.5
5	18.0	16.0	17.0	16.0	15.5	16.0	13.5	13.5	13.5	11.5	11.5	11.5
6	16.0	14.0	15.0	16.0	15.5	15.5	13.5	13.5	13.5	11.5	11.5	11.5
7	17.5	15.0	15.5	15.5	15.5	15.5	13.5	13.5	13.5	11.5	11.5	11.5
8	16.5	15.0	15.5	15.5	15.5	15.5	13.5	13.5	13.5	11.5	11.5	11.5
9	18.0	16.5	17.0	15.5	15.5	15.5	13.5	13.5	13.5	11.5	11.5	11.5
10	17.0	17.0	17.0	15.5	15.5	15.5	13.5	13.5	13.5	11.5	11.5	11.5
11	17.0	16.0	16.5	15.5	15.5	15.5	13.5	13.5	13.5	11.5	11.5	11.5
12	17.0	16.0	16.5	16.5	15.0	15.5	13.5	13.5	13.5	11.5	11.5	11.5
13	17.5	17.0	17.5	15.5	15.0	15.0	13.5	13.0	13.0	11.5	11.5	11.5
14	17.0	16.5	17.0	15.5	15.0	15.5	13.0	13.0	13.0	11.5	11.0	11.5
15	18.0	17.0	17.5	15.5	15.0	15.0	13.0	12.5	12.5	11.5	11.0	11.5
16	18.5	18.0	18.5	15.5	15.0	15.0	12.5	12.5	12.5	11.5	11.5	11.5
17	18.0	17.5	18.0	15.5	15.0	15.0	12.5	12.5	12.5	11.5	11.0	11.5
18	18.0	18.0	18.0	15.0	15.0	15.0	12.5	12.5	12.5	11.5	11.0	11.5
19	18.0	17.5	18.0	15.0	15.0	15.0	12.5	12.0	12.5	11.5	11.5	11.5
20	17.5	17.0	17.0	15.0	15.0	15.0	12.5	12.0	12.5	11.5	11.5	11.5
21	17.0	17.0	17.0	15.0	15.0	15.0	12.5	12.0	12.0	11.5	11.5	11.5
22	17.0	17.0	17.0	15.0	15.0	15.0	12.0	12.0	12.0	11.5	11.5	11.5
23	17.0	16.5	17.0	15.0	14.5	15.0	12.0	12.0	12.0	11.5	11.5	11.5
24	16.5	16.5	16.5	15.0	14.5	14.5	12.0	11.5	11.5	12.0	11.5	12.0
25	16.5	16.0	16.0	14.5	14.5	14.5	11.5	11.5	11.5	12.0	12.0	12.0
26	16.0	16.0	16.0	14.5	14.5	14.5	11.5	11.5	11.5	12.0	12.0	12.0
27	16.0	16.0	16.0	14.5	14.0	14.5	11.5	11.5	11.5	12.5	12.0	12.0
28	16.5	16.0	16.0	14.0	14.0	14.0	11.5	11.5	11.5	12.5	12.0	12.5
29	16.0	16.0	16.0	14.0	14.0	14.0	12.0	11.5	11.5	12.5	12.0	12.5
30	16.0	15.5	15.5	14.0	14.0	14.0	12.0	11.5	12.0	12.5	12.5	12.5
31	15.5	15.5	15.5	---	---	---	12.0	11.5	12.0	12.5	12.0	12.0
MONTH	19.0	11.5	16.5	16.5	14.0	15.0	14.0	11.5	12.5	12.5	11.0	11.5

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.0	12.0	12.0	12.5	12.5	12.5	14.0	14.0	14.0	16.5	16.0	16.5
2	12.0	12.0	12.0	12.5	12.5	12.5	14.5	14.0	14.0	16.5	16.0	16.5
3	12.0	11.5	11.5	12.5	12.5	12.5	14.5	14.0	14.5	16.0	15.5	16.0
4	11.5	11.5	11.5	12.5	12.5	12.5	15.0	14.5	14.5	15.5	15.5	15.5
5	11.5	11.5	11.5	12.5	12.5	12.5	15.5	14.5	15.0	15.5	15.0	15.0
6	11.5	11.5	11.5	12.5	12.5	12.5	15.0	14.5	15.0	15.5	15.0	15.0
7	11.5	11.5	11.5	12.5	12.5	12.5	15.0	14.5	14.5	15.0	15.0	15.0
8	11.5	11.5	11.5	12.5	12.5	12.5	15.0	14.5	14.5	15.0	14.5	15.0
9	11.5	11.5	11.5	12.5	12.5	12.5	14.5	14.0	14.5	15.5	15.0	15.5
10	11.5	11.5	11.5	13.0	12.5	12.5	14.5	14.0	14.0	15.5	14.5	15.0
11	11.5	11.5	11.5	13.0	12.5	12.5	14.0	13.5	14.0	15.5	15.0	15.0
12	11.5	11.5	11.5	13.0	12.5	12.5	14.0	13.5	14.0	16.0	15.5	15.5
13	11.5	11.5	11.5	13.0	12.5	13.0	15.5	14.0	15.0	17.0	15.5	16.5
14	11.5	11.5	11.5	13.0	13.0	13.0	16.0	15.5	15.5	17.5	17.0	17.0
15	11.5	11.5	11.5	13.5	13.0	13.0	16.0	14.5	15.5	17.0	16.0	17.0
16	12.0	11.5	11.5	13.5	13.0	13.5	15.0	14.0	14.5	16.0	15.0	15.5
17	12.0	11.5	12.0	13.5	13.0	13.5	14.0	13.5	14.0	16.0	15.0	15.5
18	12.5	12.0	12.0	13.5	13.5	13.5	14.0	13.5	14.0	17.0	15.5	16.0
19	12.5	12.0	12.5	13.5	13.5	13.5	14.0	14.0	14.0	17.0	16.5	16.5
20	12.5	12.5	12.5	14.0	13.5	13.5	14.0	13.5	14.0	16.5	15.5	16.0
21	12.5	12.5	12.5	13.5	13.5	13.5	14.0	13.5	14.0	16.0	15.0	15.5
22	12.0	12.0	12.0	14.0	13.5	14.0	14.5	14.0	14.5	17.5	16.0	17.0
23	12.0	12.0	12.0	14.0	13.5	14.0	15.0	14.5	14.5	18.0	17.5	17.5
24	12.5	12.0	12.0	14.0	14.0	14.0	15.5	14.5	15.0	17.5	16.5	17.0
25	12.5	12.0	12.0	14.0	14.0	14.0	16.5	15.5	16.0	17.0	15.5	16.5
26	12.5	12.0	12.5	14.0	13.5	14.0	16.5	16.5	16.5	16.0	15.0	15.5
27	12.5	12.0	12.5	13.5	13.5	13.5	16.5	16.5	16.5	15.5	15.0	15.0
28	12.5	12.5	12.5	13.5	13.5	13.5	16.5	16.5	16.5	15.5	15.0	15.0
29	---	---	---	14.0	13.5	13.5	16.5	16.0	16.0	15.5	14.5	15.0
30	---	---	---	14.0	13.5	14.0	16.0	15.5	16.0	16.0	14.5	15.5
31	---	---	---	14.0	13.5	14.0	---	---	---	17.0	16.0	16.5
MONTH	12.5	11.5	12.0	14.0	12.5	13.0	16.5	13.5	15.0	18.0	14.5	16.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.0	15.5	16.0	18.0	17.0	17.5	---	---	---	---	---	---
2	16.0	15.0	15.5	17.5	17.0	17.0	---	---	---	---	---	---
3	16.0	15.0	15.5	17.5	16.5	17.0	---	---	---	---	---	---
4	17.0	15.5	16.5	16.5	16.0	16.5	---	---	---	16.0	16.0	16.0
5	17.5	16.5	17.0	16.5	16.0	16.0	---	---	---	16.5	16.0	16.5
6	16.5	16.0	16.5	16.5	15.0	16.0	---	---	---	18.0	16.0	17.0
7	17.0	16.0	16.5	16.5	15.5	15.5	---	---	---	19.0	18.0	18.5
8	17.0	16.5	16.5	18.5	17.0	17.5	---	---	---	18.5	17.5	18.0
9	17.0	16.0	16.5	18.0	16.5	17.5	---	---	---	18.0	16.5	17.5
10	16.5	16.0	16.5	17.0	16.0	16.5	---	---	---	17.0	16.5	16.5
11	17.0	16.0	16.5	18.0	16.5	17.0	---	---	---	17.0	16.0	16.5
12	17.0	16.0	16.5	17.5	17.0	17.5	---	---	---	18.0	16.5	17.0
13	16.5	15.5	16.0	17.5	17.0	17.0	---	---	---	19.0	18.0	18.5
14	16.0	15.0	15.5	17.0	16.5	17.0	---	---	---	19.0	18.5	19.0
15	16.0	15.0	16.0	16.5	16.5	16.5	---	---	---	19.0	18.0	18.5
16	17.0	16.0	16.5	17.0	16.5	16.5	---	---	---	19.0	17.5	18.0
17	17.5	16.0	16.5	18.0	16.5	17.0	---	---	---	18.0	16.5	17.5
18	17.0	16.0	16.5	18.5	17.0	17.5	---	---	---	17.0	16.5	16.5
19	17.0	15.5	16.0	19.5	18.0	18.5	---	---	---	17.5	16.5	17.0
20	15.5	14.5	15.5	18.5	17.5	18.0	---	---	---	18.5	17.5	18.0
21	16.0	15.0	15.5	18.5	17.5	18.0	---	---	---	19.5	18.5	19.0
22	16.5	15.5	16.0	18.5	17.0	17.5	---	---	---	19.0	18.5	19.0
23	17.0	16.0	16.5	17.0	16.5	17.0	---	---	---	19.5	18.5	19.0
24	18.5	17.0	17.5	17.0	16.5	17.0	---	---	---	19.5	19.0	19.0
25	18.5	17.0	17.5	17.0	15.5	16.5	---	---	---	19.0	18.5	19.0
26	20.0	17.5	19.0	---	---	---	---	---	---	20.5	18.5	19.5
27	20.0	18.0	19.0	---	---	---	---	---	---	19.0	17.5	18.5
28	18.5	17.0	18.0	---	---	---	---	---	---	18.0	17.0	17.5
29	17.0	16.5	17.0	---	---	---	---	---	---	18.5	17.0	18.0
30	17.5	16.5	17.0	---	---	---	---	---	---	19.0	17.5	18.5
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	20.0	14.5	16.5	---	---	---	---	---	---	---	---	---
YEAR	20.5	11.0										

09423500 COLORADO RIVER AT NEEDLES, CA

LOCATION.--Lat 34°51'06", long 114°36'33", in SE¼SE¼ sec.19, T.9 N., R.23 E., San Bernardino meridian, San Bernardino County, Hydrologic Unit 15030101, on right bank at Needles, 15 mi upstream from gaging station near Topock, Ariz., 30 mi downstream from Davis Dam, and 97 mi downstream from Hoover Dam.

DRAINAGE AREA.--174,500 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--April 1931 to current year (elevations only).

REVISED RECORDS.--WSP 1119: 1931-47.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 15, 1942, at site 550 ft downstream and May 15, 1942 to Feb. 16, 1969, at site 200 ft upstream.

REMARKS.--Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 475.77 ft Nov. 30, 1944; minimum, 457.84 ft Feb. 26, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 462.37 ft Oct. 1; minimum, 457.94 ft Apr. 9.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	462.13	---	461.76	461.34	461.36	460.53	458.14	458.77	461.45	461.28	461.51	461.49
2	461.73	461.65	461.76	461.18	461.98	---	458.15	458.74	461.50	461.33	461.50	461.49
3	461.69	461.66	461.76	460.98	461.98	---	458.09	458.73	461.53	461.29	461.39	461.37
4	461.68	461.66	461.77	460.93	461.99	---	458.08	458.73	461.45	461.29	461.39	461.11
5	461.69	461.64	461.80	460.90	462.02	---	458.04	458.75	461.22	461.28	461.41	461.11
6	461.71	461.66	461.79	460.89	462.07	---	458.02	458.76	461.24	461.26	461.38	461.13
7	461.68	461.68	461.77	460.91	462.09	459.86	458.02	458.75	461.25	461.26	461.40	461.12
8	461.63	461.69	461.81	460.87	462.07	459.83	458.02	458.75	461.22	461.25	461.42	461.12
9	461.63	461.47	461.73	460.80	461.98	459.80	458.12	458.76	461.21	461.21	461.43	461.19
10	461.64	461.47	461.68	460.75	461.99	459.78	460.02	458.79	461.25	461.26	461.40	461.01
11	461.63	461.47	461.56	460.71	461.99	459.78	460.18	458.78	461.28	461.31	461.46	460.52
12	461.65	461.46	461.54	460.56	462.06	459.83	460.18	458.80	461.27	461.51	461.47	460.55
13	461.64	461.51	461.55	460.54	462.05	459.88	460.17	458.96	461.26	461.48	461.45	460.55
14	461.64	461.66	461.52	460.68	462.00	460.05	460.18	459.71	461.25	461.48	461.44	460.53
15	461.61	461.64	461.55	460.75	462.01	460.04	460.22	459.76	461.23	461.53	461.44	460.57
16	461.62	461.64	461.55	460.83	462.07	460.02	460.24	460.14	461.20	461.56	461.43	460.62
17	---	461.64	461.55	460.83	462.04	460.01	460.26	461.01	461.18	461.53	461.43	460.59
18	---	461.66	461.61	460.82	462.04	460.02	460.27	461.06	461.16	461.52	461.46	460.67
19	---	461.63	461.16	460.52	461.96	460.06	460.25	461.06	461.15	461.53	461.46	459.98
20	---	461.63	459.39	460.47	461.97	460.03	460.28	461.08	461.14	461.55	461.46	458.48
21	---	461.65	459.55	460.55	461.97	460.02	460.28	461.14	461.12	461.53	461.47	458.42
22	---	461.70	461.26	460.77	461.98	460.00	459.66	461.13	461.13	461.51	461.45	458.39
23	---	461.67	461.34	460.78	461.96	460.02	458.25	461.09	461.12	461.52	461.45	458.33
24	---	461.67	461.38	461.02	461.94	460.02	458.96	461.11	461.03	461.52	461.41	458.29
25	---	461.72	461.42	461.02	461.94	459.73	459.17	461.16	460.38	461.51	461.42	458.30
26	---	461.68	461.50	461.00	461.92	458.34	459.17	461.12	461.22	461.52	461.48	458.25
27	---	461.73	461.58	461.01	461.90	458.27	459.19	461.15	461.20	461.49	461.51	458.22
28	---	461.75	461.55	461.02	461.52	458.25	459.18	461.20	461.22	461.51	461.49	458.22
29	---	461.76	461.56	461.09	---	458.19	459.19	461.66	461.26	461.52	461.48	458.22
30	---	461.75	461.53	461.08	---	458.15	459.05	461.66	461.27	461.54	461.45	458.21
31	---	---	461.44	461.07	---	458.18	---	461.46	---	461.53	461.46	---
MAX	---	---	461.81	461.34	462.09	---	460.28	461.66	461.53	461.56	461.51	461.49
MIN	---	---	459.39	460.47	461.36	---	458.02	458.73	460.38	461.21	461.38	458.21

NOTE.--Elevations not available for periods Oct. 17 to Nov. 1, Mar. 2-6.

09423550 TOPOCK MARSH INLET NEAR NEEDLES, CA

LOCATION.--Lat 34°50'10", long 114°35'03", in NE¼NW¼ sec.33, T.9 N., R.23 E., San Bernardino meridian, in Arizona, Mohave County, Hydrologic Unit 15030101, on left bank of Colorado River on north side of intake structure, 1.3 mi east of Needles.

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorders above and below intake gates to record head; recorder to show gate opening. Datum of gages is 400.00 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: June 24-30. Records good. Topock Marsh inlet diverts water from the Colorado River into Topock Marsh, an area of 4,260 acres. This water flows through the marsh and returns to the Colorado River through the Topock Marsh outlet. The Bureau of Sport Fisheries and Wildlife maintains two other gates to the same opening as the recording gate. Monthly total return flows through the outlet, sta 09423650, Topock Marsh Outlet near Topock, AZ, are shown in the table below. Prior to June 1978, daily flows for this station were published separately.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 249 ft^3/s Mar. 5, 1976; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	82	30	74
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	82	9.0	74
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	82	.00	73
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	82	.00	72
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	82	.00	72
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	82	28	73
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	86	28	77
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	87	28	77
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	88	28	77
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	88	28	74
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	61	28	70
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	33	28	69
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	33	28	69
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	33	28	69
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	28	69
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	28	70
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	28	72
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	28	73
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	47	70
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	72	35
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	76	22
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	76	22
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	76	22
24	.00	.00	.00	.00	.00	.00	.00	.00	55	34	75	22
25	.00	.00	.00	.00	.00	.00	.00	.00	83	34	75	22
26	.00	.00	.00	.00	.00	.00	.00	.00	83	34	76	22
27	.00	.00	.00	.00	.00	.00	.00	.00	83	34	76	22
28	.00	.00	.00	.00	.00	.00	.00	.00	83	34	76	22
29	.00	.00	.00	.00	---	.00	.00	.00	83	20	78	22
30	.00	.00	.00	.00	---	.00	.00	.00	83	14	77	22
31	.00	---	.00	.00	---	.00	---	.00	---	14	77	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	553.00	1525	1360.00	1629
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	18.4	49.2	43.9	54.3
MAX	.00	.00	.00	.00	.00	.00	.00	.00	83	88	78	77
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	.00	22
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	1100	3020	2700	3230
(*)	0	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1984 TOTAL .00 MEAN .000 MAX .00 MIN .00 AC-FT .00 * 0
WTR YR 1985 TOTAL 5067.00 MEAN 13.9 MAX 88 MIN .00 AC-FT 10050 * 0

* Return flow, in acre-feet, to Colorado River.

09424150 COLORADO RIVER AQUEDUCT NEAR PARKER DAM, AZ-CA

LOCATION.--Lat 34°18'58", long 114°09'23", in NW¼SW¼ sec.28, T.3 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, Hydrologic Unit 15030101, at intake pumping plant of Metropolitan Water District of Southern California on Lake Havasu, 1.8 mi upstream from Parker Dam and 149 mi downstream from Hoover Dam.

PERIOD OF RECORD.--January 1939 to current year (monthly diversions only since October 1942). Published as a supplement to records for Colorado River below Parker Dam, 1942-50. Percolation return flow (monthly flow only) October 1964 to September 1973; prior to October 1964 miscellaneous measurements only.

GAGE.--Venturi meters in pressure lines at intake pumping plant.

REMARKS.--Pumping began Jan. 7, 1939. Figures of monthly diversion shown represent water pumped from Lake Havasu less return surface flow from Gene and Copper Basin Reservoirs. No water returned as surface flow from these reservoirs this year. Percolation return flow from Gene and Copper Basin Reservoirs is estimated by the U.S. Bureau of Reclamation as 10 acre-ft/day for a yearly total of 3,650 acre-ft, which is used for accounting purposes.

COOPERATION.--Diversion records furnished by Metropolitan Water District of Southern California.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily diversion, 3,986 acre-ft, 2,010 ft^3/s Oct. 25, 1970 and Oct. 29, 1977; no diversion at times.

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	Diversions			
	Maximum	Minimum	Mean	Total
October	3,798	3,594	3,641	112,869
November	3,757	3,480	3,644	109,324
December	3,643	1,954	3,000	92,996
CAL YR 1984	3,827	1,842	3,380	1,237,230
January	3,342	1,817	2,705	83,859
February	3,417	1,706	2,925	81,909
March	3,559	2,665	3,371	104,508
April	3,864	3,405	3,562	106,863
May	3,960	3,599	3,833	118,838
June	3,872	3,620	3,711	111,332
July	3,731	3,494	3,678	114,021
August	3,826	3,614	3,709	114,980
September	3,767	2,757	3,617	108,518
WTR YR 1985	3,960	1,706	3,452	1,260,017

09424432 FRANCIS CREEK NEAR BAGDAD, AZ

LOCATION.--Lat 34°45'42", long 113°15'54", in NW¼ sec.1, T.16 N., R.10 W., Yavapai County, Hydrologic Unit 15030202, on left bank, 13.1 mi northwest of Bagdad.

DRAINAGE AREA.--134 mi^2.

PERIOD OF RECORD.--December 1984 to September 1985 (operated as a low flow station only).

GAGE.--Water-stage recorder. Elevation of gage is 3,260 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: June 17 to July 19 and Aug. 23 to Sept. 9. Records good except those for periods of estimated daily discharges which are poor. Daily discharges above 20 cfs are not published. Diversion upstream from station for municipal supply of Bagdad.

COOPERATION.--Gage-height record was collected in cooperation with Bureau of Land Management.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	5.2	2.4	2.2	2.1	1.8	1.5	1.5
2	---	---	---	19	---	4.8	2.4	2.2	2.1	1.8	1.5	1.5
3	---	---	---	14	---	4.5	2.2	2.2	2.1	1.8	1.5	1.5
4	---	---	---	10	20	4.0	2.4	2.2	2.1	1.8	1.5	1.5
5	---	---	---	8.0	16	3.6	2.4	2.2	2.1	1.8	1.5	1.5
6	---	---	---	7.2	17	3.5	2.4	2.2	2.1	1.8	1.5	1.5
7	---	---	---	6.5	15	3.6	2.4	2.2	2.1	1.8	1.5	1.5
8	---	---	---	---	16	2.7	2.4	2.4	2.1	1.8	1.5	1.5
9	---	---	---	---	20	2.6	2.4	2.4	2.2	1.8	1.5	1.5
10	---	---	---	---	---	2.6	3.0	2.4	2.2	1.8	1.5	5.0
11	---	---	---	---	---	2.5	2.4	2.4	2.2	1.8	1.5	1.5
12	---	---	---	---	---	2.4	2.4	2.5	2.0	1.8	1.5	1.5
13	---	---	---	---	---	2.7	2.4	3.0	1.9	1.8	1.5	1.5
14	---	---	---	17	---	2.4	2.4	2.4	1.8	1.8	1.5	1.5
15	---	---	---	14	---	2.2	2.4	2.2	1.9	1.8	1.5	1.5
16	---	---	---	13	---	2.1	2.4	2.2	1.8	1.8	1.5	1.5
17	---	---	---	11	---	2.0	2.5	2.2	1.8	1.8	1.5	1.5
18	---	---	---	9.1	20	2.1	2.4	2.2	1.8	1.8	1.5	1.5
19	---	---	---	10	17	2.2	2.2	2.1	1.8	2.0	1.5	1.5
20	---	---	---	11	15	2.0	2.2	2.0	1.8	1.7	1.5	1.6
21	---	---	---	8.6	16	2.1	2.2	2.0	1.8	1.7	1.5	1.6
22	---	---	---	6.8	15	2.1	2.2	2.2	1.8	1.7	1.5	1.7
23	---	---	16	20	13	2.1	2.2	2.0	1.8	1.6	1.8	1.7
24	---	---	11	---	9.4	2.1	2.2	2.0	1.8	1.6	1.5	1.7
25	---	---	8.6	---	8.3	2.1	2.5	2.0	1.8	1.5	1.5	1.7
26	---	---	6.8	---	7.0	2.2	2.2	2.0	1.8	1.5	1.5	1.6
27	---	---	---	---	6.5	2.4	2.2	2.0	1.8	1.5	1.5	1.6
28	---	---	---	---	5.9	2.2	2.2	2.0	1.8	1.5	2.0	1.5
29	---	---	---	---	---	2.2	2.2	2.0	1.8	1.5	3.3	1.6
30	---	---	---	---	---	2.1	2.7	2.2	1.8	1.5	1.7	1.6
31	---	---	---	---	---	2.4	---	2.1	---	1.5	1.5	---
TOTAL	---	---	---	---	---	83.7	70.9	68.3	58.0	53.2	49.3	49.9
MEAN	---	---	---	---	---	2.70	2.36	2.20	1.93	1.72	1.59	1.66
MAX	---	---	---	---	---	5.2	3.0	3.0	2.2	2.0	3.3	5.0
MIN	---	---	---	---	---	2.0	2.2	2.0	1.8	1.5	1.5	1.5
AC-FT	---	---	---	---	---	166	141	135	115	106	98	99

09424447 BURRO CREEK AT OLD U.S. 93 BRIDGE NEAR BAGDAD, AZ

LOCATION.--Lat 34°32'30", long 113°26'40", in SW¼ sec.19, T.14 N., R.11 W., Mohave County, Hydrologic Unit 15030202, on left bank 15 mi upstream from confluence with Big Sandy River, and 15 mi southwest of Bagdad.

DRAINAGE AREA.--612 mi^2.

PERIOD OF RECORD.--August 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,880 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 25, Dec. 30 to Jan. 8, Jan. 10-16, Mar. 27 to Apr. 10, and Aug. 3-22. Records fair except those for periods of estimated record, which are poor.

AVERAGE DISCHARGE.--5 years, 89.8 ft^3/s, 65,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,600 ft^3/s Mar. 3, 1983, gage height, 13.70 ft; minimum daily, 0.10 ft^3/s July 16-20, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 47,400 ft^3/s Feb. 14, 1980, from slope-area measurement of peak flow at present site and datum, gage height, 15.6 ft, from high-water mark in vicinity of gage.

EXTREMES FOR CURRENT Year.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 13	0900	2,350	6.86	Jan. 28	0300	2,090	6.68
Dec. 20	1400	3,320	7.42	Feb. 10	0330	6,240	8.64
Dec. 27	1800	*12,400	*10.24	Feb. 14	0230	2,720	7.09
Jan. 8	2230	3,800	7.66				

Minimum daily, 0.14 ft^3/s Aug. 27, Aug. 29 to Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	1.7	6.0	400	303	47	14	11	2.4	.40	.28	.14
2	2.9	1.7	5.4	280	228	44	14	9.4	2.2	.28	.28	.17
3	2.5	1.7	5.1	200	196	44	13	8.6	2.0	.28	.30	.17
4	2.2	1.9	5.1	160	167	43	13	8.2	1.9	.24	.30	.17
5	2.2	1.7	5.1	120	148	42	13	7.1	1.9	.24	.30	.17
6	1.9	1.9	5.1	100	129	39	12	6.7	1.6	.24	.30	.28
7	1.9	1.9	5.1	80	118	38	12	6.7	1.6	.24	.30	.52
8	1.7	1.9	7.4	558	111	35	12	6.0	1.5	.20	.30	.31
9	1.5	1.9	11	1740	115	31	12	5.7	1.5	.24	.30	.24
10	1.3	2.0	44	668	2560	29	12	4.8	1.3	.28	.30	.24
11	1.2	2.2	41	457	900	28	11	4.6	1.3	.28	.30	.24
12	1.2	2.4	661	307	588	26	11	4.3	1.3	.28	.30	.28
13	1.1	2.5	1080	228	1250	25	11	3.8	1.2	.28	.30	.31
14	1.1	2.9	400	181	1460	23	10	3.6	1.1	.28	.30	.31
15	1.0	3.4	148	148	777	23	9.9	3.4	1.1	.31	.30	.31
16	1.0	3.6	77	136	506	22	9.4	3.4	1.0	.34	.30	.31
17	1.0	3.8	82	131	363	22	9.4	2.9	.91	.34	.30	.34
18	.91	3.8	200	118	303	22	9.0	2.9	.82	.58	.30	.82
19	1.0	4.0	196	101	200	24	9.0	2.9	.74	.66	.30	.74
20	1.6	4.3	1510	93	150	26	9.4	2.9	.66	.66	.30	.66
21	2.2	4.6	1100	95	120	29	10	2.9	.66	.74	.30	.52
22	2.7	6.0	274	95	100	30	11	2.9	.58	.66	.24	.52
23	2.9	7.4	146	95	85	29	10	3.1	.58	.58	.24	.52
24	2.9	8.2	86	261	72	25	10	3.1	.58	.58	.20	.52
25	3.4	9.0	56	303	64	22	9.4	2.7	.58	.52	.17	.58
26	3.4	9.4	40	303	58	19	8.6	2.7	.52	.52	.17	.58
27	2.7	9.9	3910	955	52	18	9.9	2.7	.52	.45	.14	.66
28	2.0	8.6	6790	1420	48	17	11	2.7	.52	.40	.17	.74
29	1.7	7.4	3540	1050	---	16	12	2.9	.52	.40	.14	.58
30	1.7	6.4	1050	1270	---	15	12	3.1	.45	.31	.14	.58
31	1.7	---	535	525	---	15	---	2.4	---	.31	.14	---
TOTAL	59.91	128.1	22021.3	12578	11171	868	330.0	140.1	33.54	12.12	8.01	12.53
MEAN	1.93	4.27	710	406	399	28.0	11.0	4.52	1.12	.39	.26	.42
MAX	3.4	9.9	6790	1740	2560	47	14	11	2.4	.74	.30	.82
MIN	.91	1.7	5.1	80	48	15	8.6	2.4	.45	.20	.14	.14
AC-FT	119	254	43680	24950	22160	1720	655	278	67	24	16	25

CAL YR	1984	TOTAL	28063.05	MEAN	76.7	MAX	6790	MIN	.10	AC-FT	55660
WTR YR	1985	TOTAL	47362.61	MEAN	130	MAX	6790	MIN	.14	AC-FT	93940

09424450 BIG SANDY RIVER NEAR WIKIEUP, AZ

LOCATION.--Lat 34°27'45", long 113°37'25", in SE¼ sec.16, T.13 N., R.13 W., Mohave County, Hydrologic Unit 15030201, on left bank 7 mi downstream from Burro Creek, 15 mi upstream from confluence with Santa Maria River, and 17 mi south of Wikieup.

DRAINAGE AREA.--2,800 mi^2, approximately.

PERIOD OF RECORD.--March 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,400 ft, above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1970, at datum 3.06 ft higher. Oct. 1, 1970, to Oct. 10, 1973, at datum 2.06 ft higher. Supplementary water-stage recorder for low flows at site 75 ft upstream at same datum from Apr. 10, 1975 to Mar. 1, 1978; Mar. 28 to Dec. 7, 1966, Apr. 2, 1969, to Apr. 9, 1975, at site 0.0 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 23-27 and Feb. 25 to Mar. 5. Records fair. Diversions above station for irrigation of about 3,800 acres, mostly by pumping from ground water.

AVERAGE DISCHARGE.--19 years, 90.8 ft^3/s, 65,780 acre-ft/yr; median of yearly mean discharges, 48 ft^3/s, 34,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,500 ft^3/s Feb. 20, 1980, gage height, 12.51 ft, from high-water mark in gage well; minimum daily, 1.3 ft^3/s July 13, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 13	1500	1,630	4.73	Jan. 28	0745	3,050	5.03
Dec. 20	1700	4,120	5.50	Feb. 10	0845	7,980	6.48
Dec. 27	1900	*14,600	*8.16	Feb. 14	0800	3,420	5,06
Jan. 9	0145	6,190	5.92				

Minimum daily, 4.0 ft^3/s Aug. 30, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	7.8	15	486	256	100	33	15	5.9	4.5	4.9	4.3
2	6.7	7.3	15	381	175	90	32	15	6.6	5.0	4.9	4.3
3	6.8	6.7	14	321	175	80	31	14	7.0	5.1	4.8	4.3
4	6.6	6.5	14	281	186	70	31	13	5.9	5.2	4.8	4.6
5	6.6	6.6	14	230	156	62	28	13	6.2	5.6	4.8	4.9
6	6.6	6.1	14	216	146	57	27	12	6.6	5.8	4.8	5.2
7	6.8	5.6	14	200	125	53	27	12	7.0	5.9	5.5	5.6
8	6.6	5.6	15	275	118	50	25	12	7.0	5.8	5.0	5.6
9	6.6	5.6	15	2030	115	49	25	12	7.4	5.8	4.7	5.6
10	6.5	5.6	17	363	2120	50	24	12	7.4	5.9	4.7	5.6
11	6.6	5.8	29	465	706	48	22	11	7.4	6.0	4.6	4.9
12	6.6	5.9	126	282	534	47	22	9.5	7.4	5.4	4.5	4.9
13	6.6	5.9	590	188	1080	44	21	9.5	7.4	4.5	4.4	4.9
14	6.6	5.9	181	156	1300	44	20	9.1	7.4	4.6	4.4	4.6
15	6.9	5.9	78	122	487	45	20	9.1	7.4	4.7	4.6	4.3
16	7.0	5.9	66	105	378	43	19	8.6	7.4	4.7	4.7	4.3
17	7.2	5.9	58	97	370	43	19	10	7.4	4.8	4.7	4.3
18	7.4	5.9	73	93	307	41	19	9.5	7.4	5.9	4.7	5.9
19	7.7	5.9	88	99	260	53	19	9.5	6.6	6.8	4.7	5.2
20	8.1	6.1	989	87	231	46	17	10	6.6	6.2	4.7	4.6
21	8.6	6.3	629	84	224	44	17	9.1	6.2	6.2	4.6	5.2
22	8.4	8.7	114	85	198	44	17	8.2	5.9	5.8	4.6	5.2
23	8.5	11	89	96	190	44	17	7.4	5.6	4.4	4.6	4.9
24	8.5	11	70	103	178	44	17	7.0	5.2	4.4	4.5	4.9
25	8.0	14	55	330	160	40	17	7.0	5.2	5.2	4.5	5.2
26	7.8	15	45	209	140	39	15	7.0	5.2	5.3	4.4	5.2
27	7.7	14	2920	525	130	36	17	6.6	5.2	5.4	4.4	5.9
28	7.7	14	8690	1350	110	38	17	6.6	5.2	5.5	4.3	7.0
29	7.8	14	5560	834	---	38	15	6.2	5.2	5.6	4.1	6.2
30	7.8	14	1510	1220	---	37	15	6.2	4.9	5.7	4.0	6.6
31	8.0	---	736	347	---	35	---	6.6	---	5.2	4.0	---
TOTAL	226.7	244.5	22843	11661	10555	1554	645	303.7	193.2	166.9	142.9	154.2
MEAN	7.31	8.15	737	376	377	50.1	21.5	9.80	6.44	5.38	4.61	5.14
MAX	8.6	15	8690	2030	2120	100	33	15	7.4	6.8	5.5	7.0
MIN	6.5	5.6	14	84	110	35	15	6.2	4.9	4.4	4.0	4.3
AC-FT	450	485	45310	23140	20930	3080	1280	602	383	331	283	306

CAL YR 1984 TOTAL 31009.9 MEAN 84.7 MAX 8690 MIN 3.5 AC-FT 61490
WTR YR 1985 TOTAL 48690.1 MEAN 133 MAX 8690 MIN 4.0 AC-FT 96570

09424900 SANTA MARIA RIVER NEAR BAGDAD, AZ

LOCATION.--Lat 34°18'21", long 113°20'47", in SE¼ sec.12, T.11 N., R.11 W., Mohave County, Hydrologic Unit 15030203, on right bank 4.0 mi east of Palmerita Ranch, 12 mi upstream from confluence with Big Sandy River, and 21 mi southwest of Bagdad.

DRAINAGE AREA.--1,210 mi^2, approximately.

PERIOD OF RECORD.--April 1966 to September 1985 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 1,360 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 1-8, 13-24 and Feb. 18-28. Records fair except those for periods of estimated daily discharges, which are poor. Diversions above station for irrigation of about 5,300 acres, most of which is by pumping from ground water.

AVERAGE DISCHARGE.--19 years (water years 1967-85), 73.7 ft^3/s, 53,400 acre-ft/yr; median of yearly mean discharges, 43 ft^3/s, 31,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,600 ft^3/s Mar. 1, 1978, gage height, 7.82 ft, from rating curve extended above 5,000 ft^3/s on basis of step-backwater computations and slope-area measurements at gage heights 5.50 and 7.82 ft; no flow for most of time in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*), from rating curve extended above 5,000 ft^3/s as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 13	0830	8,090	4.40	Jan. 8	1930	5,450	4.00
Dec. 20	1900	633	3.35	Jan. 30	0600	2,690	3.70
Dec. 27	1930	10,300	4.92	Feb. 10	0800	*10,400	*4.95

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	273	407	91	43	35	1.5	.00	.00	.00
2	.00	.00	.00	230	350	85	42	32	1.4	.00	.00	.00
3	.00	.00	.00	200	333	80	35	25	1.1	.00	.00	.00
4	.00	.00	.00	170	350	72	31	25	1.0	.00	.00	.00
5	.00	.00	1.3	140	378	77	34	21	.60	.00	.00	.00
6	.00	.00	5.7	120	378	65	32	14	.30	.00	.00	.00
7	.00	.00	6.2	110	364	70	38	19	.30	.00	.00	.00
8	.00	.00	12	920	378	56	36	19	.30	.00	.00	.00
9	.00	.00	100	2420	407	63	31	20	.00	.00	.00	.00
10	.00	.00	55	666	3390	50	33	16	.00	.00	.00	.00
11	.00	.00	276	423	1820	55	25	14	.00	.00	.00	.00
12	.00	.00	391	350	1140	72	28	11	.00	.00	.00	.00
13	.00	.00	1510	287	1340	58	27	11	.00	.00	.00	.00
14	.00	.00	201	240	1660	50	27	14	.00	.00	.00	.00
15	.00	.00	70	200	997	63	24	13	.00	.00	.00	.00
16	.00	.00	42	170	773	56	23	13	.00	.00	.00	.00
17	.00	.00	55	140	633	83	23	12	.00	.00	.00	.00
18	.00	.00	125	120	500	132	19	11	.00	.00	.00	.00
19	.00	.00	106	100	400	100	24	8.9	.00	.00	.00	.00
20	.00	.00	321	90	310	100	30	9.5	.00	.00	.00	.00
21	.00	.00	373	80	250	343	25	9.2	.00	.00	.00	.00
22	.00	.00	147	70	210	158	28	7.9	.00	.00	.00	.00
23	.00	.00	115	80	170	123	36	8.9	.00	.00	.00	.00
24	.00	.00	76	85	140	79	32	9.4	.00	.00	.00	.00
25	.00	.00	76	302	120	72	26	8.1	.00	.00	.00	.00
26	.00	.00	76	273	100	53	20	5.7	.00	.00	.00	.00
27	.00	.00	2440	437	90	51	31	3.4	.00	.00	.00	.00
28	.00	.00	2810	814	81	52	31	2.5	.00	.00	.00	.00
29	.00	.00	2500	768	---	47	36	2.3	.00	.00	.00	.00
30	.00	.00	509	1340	---	45	37	3.3	.00	.00	.00	.00
31	.00	---	364	548	---	45	---	2.3	---	.00	.00	---
TOTAL	.00	.00	12763.20	12166	17469	2547	907	406.4	6.50	.00	.00	.00
MEAN	.000	.000	412	392	624	82.2	30.2	13.1	.22	.000	.000	.000
MAX	.00	.00	2810	2420	3390	343	43	35	1.5	.00	.00	.00
MIN	.00	.00	.00	70	81	45	19	2.3	.00	.00	.00	.00
AC-FT	.00	.00	25320	24130	34650	5050	1800	806	13	.00	.00	.00

CAL YR 1984 TOTAL 21359.17 MEAN 58.4 MAX 2810 MIN .00 AC-FT 42370
WTR YR 1985 TOTAL 46265.10 MEAN 127 MAX 3390 MIN .00 AC-FT 91760

09426000 BILL WILLIAMS RIVER BELOW ALAMO DAM, AZ

LOCATION.--Lat 34°13'51", long 113°36'29", in SE¼SE¼ sec.4, T.10 N., R.13 W., La Paz County, Hydrologic Unit 15030204, on left bank 0.6 mi downstream from Alamo Dam, 3.7 mi downstream from Bullard Wash, and 8 mi downstream from confluence of Santa Maria and Big Sandy Rivers.

DRAINAGE AREA.--4,730 mi^2, approximately, of which 400 mi^2 is below confluence of Santa Maria and Big Sandy Rivers.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October and November 1939, published in WSP 1313. Prior to October 1943, published as "Williams River near Alamo. October 1943 to September 1967, published as "Bill Williams River near Alamo."

REVISED RECORDS.--WSP 1213: 1939(M). 1941(P).

GAGE.--Water-stage recorder. Elevation of gage is 967 ft above National Geodetic Vertical Datum of 1929, from construction data. Prior to Apr. 9, 1968, at site 1.7 mi upstream at datum 1,002.95 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Diversions above station for irrigation of about 9,100 acres, mostly by pumping from ground water. Flow regulated by Alamo Lake, beginning Mar. 2, 1969. Temporary storage and slight regulation of releases through uncontrolled rectangular conduit through Alamo Dam June 23, 1968, to Mar. 27, 1969. Alamo Lake is formed by an earthfill and rockfill dam, completed in 1968. Total capacity of lake is 1,043,000 acre-ft. See table below for monthend contents.

AVERAGE DISCHARGE.--29 years (water years 1940-68), 92.3 ft^3/s, 66,870 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1940-68: Maximum discharge, 65,100 ft^3/s Aug. 29, 1951, gage height, 30.8 ft, site and datum then in use; minimum daily, 1.1 ft^3/s Sept. 4, 1958.

1969-85: Maximum discharge, 4,950 ft^3/s Jan. 26, 1969, gage height, 10.20 ft; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--The history of floods that occurred prior to October 1939 is published in WSP 1683. The peak discharges have been correlated with those for Bill Williams River at Planet. The peak discharge for February 1937 has been determined as 105,000 ft^3/s at a stage of 46 ft - site and datum then in use - from rating curve extended above 50,000 ft^3/s on basis of slope-area measurement for flood of Sept. 6, 1939, at a stage of 39.6 ft, discharge of 86,000 ft^3/s and known stable high-water control.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,000 ft^3/s Mar. 21; minimum daily, 8.8 ft^3/s Feb. 26-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	13	11	13	10	1280	28	32	334	350	349
2	12	13	13	11	13	10	466	28	32	337	350	349
3	12	13	13	11	13	9.6	26	28	33	337	350	147
4	12	13	13	12	13	9.6	25	28	157	334	350	27
5	13	13	13	12	13	220	25	28	343	337	346	26
6	13	13	13	11	13	462	26	28	346	337	344	168
7	13	13	13	11	14	470	25	28	346	337	340	367
8	14	13	13	11	14	593	24	28	346	343	340	370
9	14	13	13	10	14	658	24	28	349	349	346	373
10	14	13	13	10	13	658	25	28	352	349	352	373
11	14	13	13	11	12	783	25	28	352	349	349	373
12	14	13	13	11	12	890	26	28	349	352	349	370
13	14	13	12	11	12	890	26	28	349	352	346	364
14	14	13	11	11	12	890	26	28	349	352	343	364
15	14	13	10	11	12	1140	26	28	349	355	343	367
16	14	13	10	11	12	1300	26	28	349	355	343	370
17	14	13	10	11	12	1300	26	28	349	355	340	370
18	14	13	10	11	12	957	26	28	349	355	334	370
19	14	13	10	11	12	1490	26	28	349	350	340	370
20	14	13	10	11	11	1920	26	28	349	350	340	370
21	14	13	10	11	10	2000	26	28	355	350	337	370
22	14	13	10	11	10	1960	26	28	355	350	337	370
23	14	13	10	11	10	1960	27	28	355	350	337	370
24	14	13	10	11	9.6	1950	27	28	355	350	337	370
25	14	13	10	12	9.2	1950	27	28	355	350	340	370
26	14	13	10	12	8.8	1880	27	28	355	350	343	370
27	14	13	10	12	8.8	1880	28	28	355	350	346	367
28	14	13	10	12	8.8	1850	28	28	346	350	343	367
29	14	13	10	13	---	1820	28	28	334	350	346	367
30	14	13	11	13	---	1850	28	28	334	350	346	367
31	14	---	11	13	---	1870	---	28	---	350	346	---
TOTAL	424	390	351	351	327.2	35630.2	2477	868	9328	10769	10653	9925
MEAN	13.7	13.0	11.3	11.3	11.7	1149	82.6	28.0	311	347	344	331
MAX	14	13	13	13	14	2000	1280	28	355	355	352	373
MIN	12	13	10	10	8.8	9.6	24	28	32	334	334	26
AC-FT	841	774	696	696	649	70670	4910	1720	18500	21360	21130	19690
(*)	241800	240500	316200	347300	379800	317900	311200	308900	288500	268300	246800	229300

CAL YR 1984 TOTAL 56365.2 MEAN 154 MAX 2000 MIN 5.4 AC-FT 111800 (**) -22300
WTR YR 1985 TOTAL 81493.4 MEAN 223 MAX 2000 MIN 8.8 AC-FT 161600 (**) -15900

* Storage, in acre-feet, at end of month for Alamo Lake, furnished by U.S. Army Corps of Engineers.
** Change in storage, in acre-feet.

09426600 BILL WILLIAMS RIVER AT MINERAL WASH NEAR PLANET, AZ
(National stream-quality accounting network)

LOCATION.--Lat 34°15'18", long 114°00'32", in SE¼NE¼ sec.34, T.11 N., R.17 W., (revised), on boundary between Mohave and La Paz Counties, Hydrologic Unit 15030204, at convergence with Mineral Wash, 4.0 mi west of Planet Ranch, 6.1 mi upstream from waterline of Havasu Lake at elevation 450 ft above National Geodetic Vertical Datum of 1929, and approximately 30 mi downstream from Alamo Lake.

DRAINAGE AREA.--5,140 mi^2 approximately, of which approximately 410 mi^2 is below Alamo Dam.

PERIOD OF RECORD.--January 1970 to January 1972, October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1981.
WATER TEMPERATURES: October 1974 to September 1981.

REMARKS.--Streamflow ungaged.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 1984												
28...	1200	15	840	7.80	16.0	18.0	8.0	757	8.8	94	78	270
FEB 1985												
13...	1210	13	870	7.90	16.0	19.0	1.9	759	9.2	100	18	130
MAY												
15...	1430	11	730	7.90	38.0	31.0	1.5	750	7.1	--	40	190
AUG												
28...	1310	300	620	7.80	41.0	28.5	6.5	753	7.5	--	110	1700

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV 1984												
28...	200	0	53	17	92	3	6.0	257	0	210	83	86
FEB 1985												
13...	200	0	51	18	93	3	5.8	254	0	208	82	80
MAY												
15...	210	14	55	17	90	3	6.1	237	0	194	82	79
AUG												
28...	160	5	41	14	64	2	5.5	190	0	156	52	55

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
NOV 1984												
28...	1.4	31	497	500	0.68	0.94	0.02	0.6	0.07	0.03	0.03	0.09
FEB 1985												
13...	1.3	32	501	500	0.68	0.88	0.02	0.4	0.03	0.01	0.02	0.06
MAY												
15...	1.3	32	460	480	0.63	0.79	0.06	1.0	0.04	0.03	0.03	0.09
AUG												
28...	1.0	24	358	350	0.49	0.14	0.04	0.4	0.08	0.08	0.06	0.18

09426600 BILL WILLIAMS RIVER AT MINERAL WASH NEAR PLANET, AZ--Continued

WATER QUALITY DATA

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
NOV 1984 28...	10	6	80	<0.5	<1	1	<3	1	6	5	49	10
FEB 1985 13...	<10	7	88	0.7	<1	1	<3	<1	11	<1	45	12
MAY 15...	10	6	87	<0.5	2	<1	<3	1	4	3	49	3
AUG 28...	20	8	62	<0.5	<1	<1	<3	1	3	<1	29	14

DATE	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
NOV 1984 28...	<0.1	<10	3	<1	<1	660	8	8	30	54	2.2
FEB 1985 13...	<0.1	<10	1	<1	<1	730	9	22	26	37	1.3
MAY 15...	--	10	3	<1	<1	640	11	15	33	5	0.15
AUG 28...	--	<10	1	<1	<1	460	<6	45	--	--	--

< Actual value is known to be less than value shown.

09426650 CAP CANAL HAVASU PUMPING PLANT NEAR PARKER, AZ

LOCATION.--Lat 34°17'20, long 114°06'37", in NW¼NW¼ sec.23, T.11 N., R.18 W., La Paz County, Hydrologic Unit 15030204, on left bank of Bill Williams River arm of Lake Havasu, 2 mi upstream from Parker Dam and 19 mi northeast of Parker.

PERIOD OF RECORD.--October 1984 to current year.

REMARKS.--Figures of monthly diversion shown represent water pumped from Lake Havasu for delivery to the Central Arizona Project. Pumps were tested starting on Mar. 8, 1985.

COOPERATION.--Diversion records furnished by U. S. Bureau of Reclamation, Central Arizona Project.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily diversion, 1,125 acre-ft July 9, 1985; no diversion on many days.

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	Diversions			
	Maximum	Minimum	Mean	Total
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
CAL YR 1984	---	---	---	---
January	0	0	0	0
February	0	0	0	0
March	260	0	42	1,303
April	347	0	39	1,161
May	521	0	123	3,805
June	347	0	54	1,612
July	1,125	0	127	3,936
August	797	0	404	12,541
September	697	0	164	4,916
WTR YR 1985	1,125	0	80	29,274

WATER QUALITY RECORDS

LOCATION.--Lat 34°10'43", long 114°03'04", in NE¼SE¼ sec.29, T.10 N., R.17 W., La Paz County, Hydrologic Unit 15030104, 7.9 mi southeast of CAP Havasu Pumping Plant, and approximately 18 mi from Parker, AZ.

PERIOD OF RECORD.--August 1985 to current year.

WATER QUALITY DATA

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	HARDNESS (MG/L AS CACO3) (00900)
AUG 1985												
28...	1015	E100	880	7.90	35.0	26.0	3	737	7.6	97	25	290

DATE	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFIDE TOTAL (MG/L AS S) (00745)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
AUG 1985												
28...	170	72	26	77	2	4.2	138	0	113	<0.5	220	61

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
AUG 1985												
28...	0.4	9.6	563	540	0.77	0.10	0.10	0.06	0.5	0.6	2.7	<0.01

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
AUG 1985												
28...	0.02	<0.01	3	2	100	110	140	120	1	<1	<1	5

DATE	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
AUG 1985											
28...	2	300	4	<100	<1	40	<0.1	4	<1	<1	110

DATE	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)	ALDRIN, TOTAL (UG/L) (39330)	CHLORDANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DIELDRIN TOTAL (UG/L) (39380)
AUG 1985											
28...	43	2.8	<0.01	<1	0.05	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01

DATE	ENDOSULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METHOXYCHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L) (39250)	PERTHANE TOTAL (UG/L) (39034)	PCB, TOTAL (UG/L) (39516)	TOXAPHENE, TOTAL (UG/L) (39400)
AUG 1985											
28...	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	<0.1	<0.1	<1

E Estimated
< Actual value is known to be less than value shown.

09427100 CAP CANAL AT MP 162.3 AT 7TH STREET AT PHOENIX, AZ

WATER-QUALITY RECORDS

LOCATION.--Lat 33°42'07", long 112°03'54", in NE¼SE¼SE¼ sec.8, T.4 N., R.3 E., Maricopa County, Hydrologic Unit 15050106, on upstream side of 7th Street Bridge in Phoenix.

PERIOD OF RECORD.--July 1985 to September 1985.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
JUL 1985 19...	1230	0.0	338	8.00	40.0	29.5	--	721	8.1	--	--	--
AUG 30...	1045	569	953	8.90	39.0	31.0	7	720	9.4	--	40	K8
SEP 26...	0955	0.0	1010	8.50	31.0	25.0	--	720	8.0	104	--	--

DATE	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFIDE TOTAL (MG/L AS S) (00745)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
JUL 1985 19...	57	0	13	6.0	47	3	9.1	--	--	--	--	36
AUG 30...	180	85	33	23	130	4	19	86	13	91	<0.5	240
SEP 26...	280	170	63	31	100	3	7.4	120	7.0	108	--	290

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)
JUL 1985 19...	17	1.0	17	217	210	0.3	<0.10	<0.10	--	0.8	0.01	--
AUG 30...	85	1.1	17	602	620	0.82	<0.10	<0.10	0.02	1.1	0.02	<0.01
SEP 26...	81	0.4	9.6	678	660	0.92	<0.10	<0.10	--	0.5	0.02	--

DATE	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
JUL 1985 19...	0.01	0.03	--	--	--	--	--	60	--	--	--	--
AUG 30...	<0.01	--	4	4	<100	120	320	230	1	10	<1	8
SEP 26...	0.01	0.03	--	--	--	--	--	150	--	--	--	--

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09427100 CAP CANAL AT MP 162.3 AT 7TH STREET AT PHOENIX, AZ--Continued

WATER-QUALITY DATA

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
JUL 1985											
19...	--	--	<3	--	--	--	--	--	--	--	--
AUG											
30...	2	190	4	<100	<1	20	<0.1	7	<1	<1	40
SEP											
26...	--	--	<3	--	--	--	--	--	--	--	--

DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)
JUL 1985											
19...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	14	<0.01	<1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
SEP											
26...	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L) (39250)	PER-THANE TOTAL (UG/L) (39034)	PCB, TOTAL (UG/L) (39516)	TOX-APHENE, TOTAL (UG/L) (39400)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUL 1985											
19...	--	--	--	--	--	--	--	--	--	5	--
AUG											
30...	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	<0.1	<0.1	<1	13	20
SEP											
26...	--	--	--	--	--	--	--	--	--	3	--

< Actual value is known to be less than value shown.

09427500 LAKE HAVASU NEAR PARKER DAM, AZ-CA

LOCATION.--Lat 34°18'58", long 114°09'23", in NW¼SW¼ sec.28, T.3 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, Hydrologic Unit 15030101, at intake pumping plant for Colorado River aqueduct of Metropolitan Water District of Southern California, 1.8 mi upstream from Parker Dam on Colorado River, and 149 mi downstream from Hoover Dam.

DRAINAGE AREA.--182,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--July 1938 to current year. Published as "Parker Reservoir near Parker Dam" 1938.

REVISED RECORDS.--WRD Ariz. 1975: 1974 (elevation).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by concrete-arch dam; dam was completed and storage began July 1, 1938. Usable capacity - based on April 1957 re-survey by Bureau of Reclamation between elevations 430.54 ft and 450.54 ft - 619,400 acre-ft between elevations 400.54 ft, sill of regulating gates, and 450.54 ft, top of regulating gates. Prior to Oct. 1, 1956, different capacity table used. Dead storage, 28,600 acre-ft below elevation 400.54 ft, based on original survey. About 0.07 ft fall indicated between gage and Parker Dam under normal operating conditions. drawdown below elevation 440.54 ft not legally permissible except by consent of the Metropolitan Water District of Southern California or in an emergency affecting the safety of the dam. Lake is used for flood control, power development, re-regulation of river for irrigation demand, and as a basin from which water is pumped by Metropolitan Water District of Southern California to Colorado River aqueduct. Figures given herein represent usable contents. For record of diversion to Colorado River aqueduct, see record for Colorado River aqueduct near Parker Dam elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum storage, 693,000 acre-ft, by temporary use of flashboards, Apr. 18, 1943, June 4, 1953; maximum elevation, 451.13 ft June 1, 1982, affected by wind; minimum storage, 71,400 acre-ft June 25, 1942, elevation, 412.09 ft.

EXTREMES FOR CURRENT YEAR.--Maximum storage, not determined, maximum elevation, 449.80 ft June 3, affected by wind; minimum storage, 529,200 acre-ft Oct. 20, elevation, 445.79 ft.

RESERVOIR STORAGE, (AC-FT) WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
2400 HRSVALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	589100	542300	558400	584400	549900	554500	573200	580000	603400	579200	575800	564200
2	588000	542500	559600	585100	548500	553900	568400	581500	603000	578100	575400	564800
3	585700	543600	562000	585500	547700	554100	563100	582100	603800	577700	575400	565400
4	583400	544100	561800	585300	547700	553700	560000	583400	603800	576000	574500	566700
5	581100	544300	562900	585100	546300	554300	556900	583800	603400	575300	574300	567100
6	578500	544900	565000	584200	546300	553500	554300	585300	603000	574700	573000	567500
7	576600	544900	565000	584000	548100	551900	551300	585900	601800	574300	571500	568000
8	574300	546300	566500	584200	549000	550600	548100	587600	600600	572800	571300	568600
9	572200	546300	567700	584200	549900	548500	545400	587400	601600	570700	570700	569400
10	569200	546300	568800	583200	549900	546500	547000	588400	598600	569400	569400	572600
11	566700	545900	569700	582900	549900	544500	553500	589500	598200	568800	569600	575800
12	564800	544500	576800	580600	549900	544100	560200	591400	597600	569200	569400	575600
13	562000	545200	571300	577000	549900	543100	566700	587600	596400	569600	569000	580600
14	559400	545800	571100	574700	549500	542700	572800	585300	595800	569600	568800	582500
15	556900	546300	569900	573400	548800	543100	574300	583800	595400	570500	568400	584200
16	553500	547000	569900	571500	548500	544300	576200	583800	595000	571300	567500	585700
17	552200	547700	571100	570500	548500	546300	577900	584800	594000	571500	567500	587600
18	540500	548300	570100	569400	548100	548100	580400	586100	593000	572400	568000	590800
19	530100	548800	571300	567700	548100	549900	581900	587600	591400	573500	567500	592400
20	530500	549500	568800	565000	548800	553100	583800	589100	590800	574300	567100	588900
21	535500	549900	561600	562500	549900	557300	585700	591400	589500	574700	566700	584200
22	536900	551000	559200	560500	550800	560700	588400	593600	588200	575100	566500	579600
23	537300	552200	559400	558800	552100	564400	583800	595400	587600	575100	565900	575300
24	537500	552200	561600	557300	552100	567100	579100	597000	586100	574700	565800	569900
25	537300	553700	563100	557100	553500	574300	581000	599000	583000	575400	565000	564600
26	537300	555400	566500	556200	553900	579100	577500	600400	581500	575800	565400	557900
27	538600	555400	570100	555600	554600	580000	576600	601800	581300	575800	565200	554100
28	539100	556000	573700	555600	555200	581000	576000	602400	580000	576200	565400	548300
29	540000	556900	577000	555000	---	579600	577700	602400	579600	576200	565200	544900
30	540700	558100	579600	555000	---	577500	579100	603200	579800	575800	564600	542300
31	541400	---	584000	555400	---	576000	---	603200	---	575800	563900	---
MAX	589100	558100	584000	585500	555200	581000	588400	603200	603800	579200	575800	592400
MIN	530100	542300	558400	555000	546300	542700	545400	580000	579600	568800	563900	542300
(**)	-46600	+16700	+25900	-28600	-200	+20800	+3100	+24100	-23400	-4000	-11900	-21600

CAL YR 1984 MAX 595600 MIN 530100 ** +52300
WTR YR 1985 MAX 603800 MIN 530100 ** -45700

** Change in storage, in acre-feet.

09427500 LAKE HAVASU NEAR PARKER DAM, AZ-CA--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	449.02	446.52	447.40	448.77	446.94	447.19	448.18	448.54	449.74	448.50	448.32	447.71
2	448.96	446.53	447.46	448.81	446.86	447.16	447.93	448.62	449.72	448.44	448.30	447.74
3	448.84	446.59	447.59	448.83	446.82	447.17	447.64	448.65	449.76	448.42	448.30	447.77
4	448.72	446.62	447.58	448.82	446.82	447.15	447.48	448.72	449.76	448.33	448.25	447.84
5	446.60	446.63	447.64	448.81	446.74	447.18	447.32	448.74	449.74	448.29	448.24	447.86
6	448.46	446.66	447.75	448.76	446.74	447.14	447.18	448.82	449.72	448.26	448.17	447.88
7	448.36	446.66	447.75	448.75	446.84	447.05	447.02	448.85	449.66	448.24	448.09	447.91
8	448.24	446.74	447.83	448.76	446.89	446.98	446.84	448.94	449.60	448.16	448.08	447.94
9	448.13	446.74	447.89	448.76	446.94	446.86	446.69	448.93	449.65	448.05	448.05	447.98
10	447.97	446.74	447.95	448.71	446.94	446.75	446.78	448.98	449.50	447.98	447.98	448.15
11	447.84	446.72	448.00	448.69	446.94	446.64	447.14	449.04	449.48	447.95	447.99	448.32
12	447.74	446.64	448.37	448.57	446.94	446.62	447.49	449.14	449.45	447.97	447.98	448.31
13	447.59	446.68	448.08	448.38	446.94	446.56	447.84	448.94	449.39	447.99	447.96	448.57
14	447.45	446.71	448.07	448.26	446.92	446.54	448.16	448.82	449.36	447.99	447.95	448.67
15	447.32	446.74	448.01	448.19	446.88	446.56	448.24	448.74	449.34	448.04	447.93	448.76
16	447.14	446.78	448.01	448.09	446.86	446.63	448.34	448.74	449.32	448.08	447.88	448.84
17	447.07	446.82	448.07	448.04	446.86	446.74	448.43	448.79	449.27	448.09	447.88	448.94
18	446.42	446.85	448.02	447.98	446.84	446.84	448.56	448.86	449.22	448.14	447.91	449.11
19	445.84	446.88	448.08	447.89	446.84	446.94	448.64	448.94	449.14	448.21	447.88	449.19
20	445.86	446.92	447.95	447.75	446.88	447.12	448.74	449.02	449.11	448.24	447.86	449.01
21	446.14	446.94	447.57	447.62	446.94	447.34	448.84	449.14	449.04	448.26	447.84	448.76
22	446.22	447.00	447.44	447.51	446.99	447.52	448.98	449.25	448.97	448.28	447.83	448.52
23	446.24	447.07	447.45	447.42	447.06	447.72	448.74	449.34	448.94	448.28	447.80	448.29
24	446.25	447.07	447.57	447.34	447.06	447.86	448.49	449.42	448.86	448.26	447.79	448.01
25	446.24	447.15	447.65	447.33	447.14	448.24	448.59	449.52	448.70	448.30	447.75	447.73
26	446.24	447.25	447.83	447.28	447.16	448.49	448.41	449.59	448.62	448.32	447.77	447.37
27	446.31	447.25	448.02	447.25	447.20	448.54	448.36	449.66	448.58	448.32	447.76	447.17
28	446.34	447.27	448.21	447.25	447.23	448.59	448.33	449.69	448.54	448.34	447.77	446.85
29	446.39	447.32	448.38	447.22	---	448.52	448.42	449.69	448.52	448.34	447.76	446.66
30	446.43	447.38	448.52	447.22	---	448.41	448.49	449.73	448.53	448.32	447.73	446.52
31	446.47	---	448.75	447.24	---	448.33	---	449.73	---	448.32	447.69	---
MAX	449.02	447.38	448.75	448.83	447.23	448.59	448.98	449.73	449.76	448.50	448.32	449.19
MIN	445.84	446.52	447.40	447.22	446.74	446.54	446.69	448.54	448.52	447.95	447.69	446.52

CAL YR 1984 MAX 449.35 MIN 445.84
WTR YR 1985 MAX 449.76 MIN 445.84

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA

LOCATION.--Lat 34°17'44", long 114°08'22", in NW¼NW¼ sec.3, T.2 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, Hydrologic Unit 15030104, on north end of powerplant at Parker Dam, 13 mi northeast of Parker, Ariz., and 14 mi upstream from Headgate Rock Dam.

DRAINAGE AREA.--182,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to September 1934 (gage heights and fragmentary discharge records), October 1934 to current year. Prior to October 1937, published as "near Parker, Ariz."

REVISED RECORDS.--WSP 1313: 1941(M).

GAGE.--Water-stage recorder. Datum of gage is 300.54 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1967, at site 3.8 mi downstream at datum 346.23 ft above NGVD.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Mead since Feb. 1, 1935, by Lake Mohave since Jan. 17, 1950, and by Lake Havasu since July 1, 1938. Many diversions above station. For record of diversion to Colorado River aqueduct and return flows, see record for Colorado River aqueduct near Parker Dam, elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,400 ft^3/s Feb. 8, 1937; no flow at Parker Dam for parts of several days in 1942 when gates in dam were closed; minimum daily discharge, 920 ft^3/s Jan. 11, 1978.

An unregulated discharge of probably less than 1,350 ft^3/s occurred Aug. 18, 1934 (lowest unregulated discharge since 1917 and probably since a much earlier date).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 27,100 ft^3/s Oct. 17; minimum daily, 19,000 ft^3/s Mar. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26800	24900	24700	24900	25700	26800	21300	19600	26200	26200	26100	26000
2	26800	25000	24800	25000	26400	26900	21200	19600	26300	26400	26100	26100
3	26800	25000	24800	24900	26500	26800	21000	19700	26200	26300	26100	25500
4	26800	24900	24800	24900	26500	26800	19200	19600	26200	26400	26100	25100
5	26800	25000	24800	24900	26500	24800	19200	19700	26200	26300	26100	25100
6	26800	25000	24700	24900	26500	22800	19200	19700	26200	26300	26100	25100
7	26800	25000	24700	24900	25600	21900	19200	19700	26200	26200	26100	25100
8	26900	25300	24800	24900	25700	21800	19200	19700	26200	26200	26100	25100
9	26800	25500	24600	24900	26400	21900	19100	19700	26200	26200	26100	25100
10	26800	25400	24600	24800	26400	21900	19100	19700	26200	26100	26100	23800
11	26800	25400	24700	24800	26400	21900	19100	19700	26200	26100	26100	23200
12	26800	25400	24600	24800	26400	21900	19200	19700	26200	26100	26100	23100
13	26800	25500	24600	24800	26500	21900	19200	22000	26200	26100	26100	23100
14	26800	25400	24700	24700	26400	21900	19300	22300	26200	26100	26100	23100
15	26800	25400	24700	24700	26600	21900	21400	22300	26200	26100	26000	23100
16	26900	25200	24700	24700	26500	22100	21500	22300	26200	26100	26100	23200
17	27100	25300	24600	24700	26600	22200	21500	23400	26200	26300	26100	23200
18	26900	25300	24700	24700	26500	22400	21400	24100	26200	26200	26100	22200
19	24800	25300	24900	24700	26600	22300	21400	24100	26200	26200	26100	22300
20	23600	25200	25100	24700	26700	22300	21500	24200	26200	26200	26100	21500
21	23700	25400	25000	24700	26700	22300	21500	24100	26200	26200	26000	21000
22	24300	25300	25000	24600	26600	22300	21400	24100	26200	26200	26000	21000
23	24800	25400	24900	24700	26600	22300	21400	24200	26100	26200	26000	20900
24	24900	25400	25000	24600	26700	22400	21400	24200	26100	26100	26000	20900
25	24900	25400	25000	24500	26700	21000	20400	24200	26100	26100	26000	20900
26	24900	25100	24900	24600	26700	19000	20300	24300	26000	26100	26000	20800
27	25000	24700	25000	24600	26700	19100	20300	24300	26000	26100	26000	20800
28	24900	24800	25100	24600	26800	20800	20300	24800	26000	26100	26000	20800
29	25000	24800	25100	24600	---	20700	19600	25900	26000	26100	26000	20700
30	25000	24800	25100	24700	---	20600	19600	26000	26000	26000	26000	19500
31	25000	---	24900	24700	---	20500	---	26200	---	26000	26000	---
TOTAL	803800	755600	769600	767200	740900	694200	609400	693100	784800	811300	807900	687300
MEAN	25930	25190	24830	24750	26460	22390	20310	22360	26160	26170	26060	22910
MAX	27100	25500	25100	25000	26800	26900	21500	26200	26300	26400	26100	26100
MIN	23600	24700	24600	24500	25600	19000	19100	19600	26000	26000	26000	19500
AC-FT	1594000	1499000	1527000	1522000	1470000	1377000	1209000	1375000	1557000	1609000	1602000	1363000

CAL YR 1984 TOTAL 10317300 MEAN 28190 MAX 33200 MIN 23100 AC-FT 20460000
WTR YR 1985 TOTAL 8925100 MEAN 24450 MAX 27100 MIN 19000 AC-FT 17700000

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1982 to current year.
WATER TEMPERATURES: February 1954 to August 1970; September 1982 to current year.

EXTREMES FOR PERIOD OF DAILY RECORDS.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,170 microsiemens Jan. 17, 1983; minimum recorded, 845 microsiemens Apr. 2, 1985.
WATER TEMPERATURE: Maximum recorded, 28.5°C Aug. 12, 13, 18, 1955; minimum recorded, 7.5°C Jan. 11, 1983.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 968 microsiemens Nov. 20; minimum recorded, 845 microsiemens Apr. 2.
WATER TEMPERATURE: Maximum recorded, 24.5°C June 26, 27; minimum recorded, 9.5°C Feb. 7.

INSTRUMENTATION.--Water temperature recorder from February 1954 to August 1970. Specific conductance and water temperature recorder from September 1982 to current year.

REMARKS.--Prior to October 1968, published as 09428000.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT 1984 03...	1130	26500	910	8.30	29.0	21.0	2.0	770	8.8	98	--	<1
NOV 28...	1300	25000	930	8.30	19.0	13.0	2.5	745	10.8	105	<10	<1
DEC 19...	1100	24900	940	8.30	17.0	12.5	2.4	760	11.1	105	26	<1
JAN 1985 15...	1430	24400	940	8.00	17.0	11.0	1.8	759	13.0	119	<10	K2
FEB 20...	1100	26700	930	8.00	22.0	12.0	1.8	750	10.6	100	<10	<1
MAR 19...	1600	22300	940	8.10	22.0	16.0	1.8	756	9.9	101	21	<1
APR 17...	1100	21200	930	8.20	29.0	18.0	1.2	755	8.3	89	26	K4
MAY 14...	1415	22200	930	8.00	36.5	21.5	2.0	756	8.6	99	21	K4
JUN 11...	1355	25600	900	7.90	40.0	22.5	2.3	760	9.0	105	30	<1
JUL 16...	1315	26400	900	8.20	32.5	22.5	1.4	754	8.9	104	12	K3
AUG 21...	1300	26100	890	7.80	38.0	23.0	1.7	756	8.6	101	12	--
SEP 05...	1030	25200	890	8.00	25.0	22.0	1.5	756	8.5	98	10	<1

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT 1984 03...	<1	300	170	76	26	81	2	3.8	150	0	123	250
NOV 28...	<1	280	150	68	26	80	2	3.7	154	0	126	240
DEC 19...	<1	290	170	75	26	80	2	3.8	154	0	126	240
JAN 1985 15...	<1	290	150	72	26	78	2	3.9	162	0	133	240
FEB 20...	K17	300	180	77	27	>5.0	--	4.1	150	0	123	240
MAR 19...	130	300	190	75	28	>5.0	--	4.0	133	0	109	230
APR 17...	840	310	190	80	27	>10	--	4.1	154	0	126	240
MAY 14...	210	300	170	76	26	>10	--	4.0	149	0	122	240
JUN 11...	52	300	170	77	26	>5.0	--	4.0	155	0	127	230
JUL 16...	92	280	150	71	26	75	2	4.1	159	0	130	230
AUG 21...	--	280	150	69	25	75	2	3.9	152	0	125	230
SEP 05...	K20	280	150	71	25	77	2	3.9	154	0	126	230

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.
> Actual value is known to be greater than value shown.

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

WATER QUALITY DATA

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT 1984 03...	66	0.3	626	<1	--	--	--	--	--	--	--	2
NOV 28...	64	0.3	616	8	0.30	0.01	0.29	0.3	0.6	2.7	0.02	2
DEC 19...	63	0.3	565	7	0.30	0.04	0.56	0.6	0.9	4.0	0.02	2
JAN 1985 15...	65	0.3	595	5	0.30	0.01	0.39	0.4	0.7	3.1	0.01	3
FEB 20...	63	0.3	586	4	0.30	0.05	0.15	0.2	0.5	2.2	0.01	2
MAR 19...	63	0.3	583	2	0.30	0.02	0.38	0.4	0.7	3.1	<0.01	1
APR 17...	64	0.3	587	1	0.20	0.03	--	--	--	--		3
MAY 14...	63	0.3	590	3	0.20	0.05	4.8	4.9	5.1	23	<0.01	2
JUN 11...	64	0.3	582	4	0.20	0.13	0.47	0.6	0.8	3.5	<0.01	2
JUL 16...	63	0.3	569	2	0.20	0.05	0.35	0.4	0.6	2.7	0.04	3
AUG 21...	61	0.3	--	3	0.20	0.06	0.34	0.4	0.6	2.7	<0.01	--
SEP 05...	62	0.3	567	4	0.20	0.04	0.26	0.3	0.5	2.2	0.02	3

DATE	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
OCT 1984 03...	2	110	110	<1	<1	1	<1	<1	2	90	<3	5
NOV 28...	2	110	110	<1	<1	5	2	3	1	110	<3	2
DEC 19...	2	100	120	<1	<1	26	20	2	5	90	5	3
JAN 1985 15...	2	110	110	<1	<1	4	<1	10	1	90	<3	6
FEB 20...	1	110	120	1	<1	<1	<1	8	1	50	<3	1
MAR 19...	2	110	110	1	<1	<1	<1	10	3	90	<3	3
APR 17...	1	110	110	1	1	2	<1	4	3	90	5	<1
MAY 14...	<1	110	120	<1	2	6	<1	9	2	100	5	7
JUN 11...	2	110	100	1	<1	2	<1	37	8	110	9	19
JUL 16...	3	110	110	<1	<1	3	<1	2	2	190	<3	2
AUG 21...	2	110	<10	<1	<1	4	<1	1	1	160	<3	<1
SEP 05...	2	110	110	<1	<1	3	1	6	2	120	<3	3

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT 1984 03...	<1	10	--	<0.1	--	2	2	<1	20	14	--	--
NOV 28...	4	10	--	0.1	--	3	3	<1	<10	8	4	236
DEC 19...	<1	30	--	0.1	--	3	3	<1	<10	7	3	208
JAN 1985 15...	3	<10	--	<0.1	--	--	3	<1	<10	8	5	336
FEB 20...	<1	<10	<1	<0.1	--	8	3	<1	<10	9	3	209
MAR 19...	<1	50	1	<0.1	--	3	2	1	20	9	--	--
APR 17...	<1	20	5	<0.1	--	4	2	<1	10	19	2	120
MAY 14...	3	<10	3	0.1	--	--	3	<1	10	7	4	210
JUN 11...	2	10	<1	0.1	--	--	2	<1	30	65	3	200
JUL 16...	3	20	1	<0.1	--	7	3	<1	70	20	2	142
AUG 21...	3	30	4		<0.1		3	<1	40	10	1	99
SEP 05...	1	20	4	0.1	--	3	3	<1	10	13	3	218

< Actual value is known to be less than value shown.

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	928	918	918	945	935	942	932	922	925	935	925	932
2	918	908	917	948	938	941	933	923	926	935	925	929
3	929	909	921	950	940	944	933	913	923	935	925	930
4	929	919	924	953	943	946	934	924	926	935	925	932
5	940	930	934	956	926	946	935	925	926	935	925	933
6	940	910	927	949	939	941	936	926	929	935	925	934
7	921	911	921	952	932	945	936	926	927	935	925	932
8	922	912	921	944	934	941	937	907	926	935	905	931
9	922	912	920	947	937	944	938	928	928	935	925	933
10	933	913	923	950	920	932	928	928	928	935	925	934
11	923	913	921	943	923	931	929	909	924	935	925	935
12	924	914	922	945	935	940	930	930	930	945	925	935
13	924	914	920	948	928	941	931	921	929	935	935	935
14	925	915	918	951	941	943	931	921	930	945	925	934
15	925	915	916	954	934	946	932	922	929	945	935	936
16	926	916	916	957	937	947	933	923	929	945	935	936
17	927	917	918	959	939	950	933	923	928	945	935	937
18	927	907	917	962	942	955	934	924	930	944	934	938
19	918	908	918	965	945	953	945	925	935	944	934	939
20	918	908	916	968	948	957	935	925	934	944	934	937
21	919	909	919	960	950	957	935	925	931	944	934	935
22	919	909	915	963	943	952	935	925	931	944	934	939
23	920	910	914	966	946	955	935	925	932	944	934	937
24	923	913	923	959	939	953	935	925	931	944	934	937
25	925	925	925	962	942	952	935	925	931	944	934	935
26	938	928	933	934	924	929	935	925	931	943	933	937
27	941	931	931	937	927	931	935	915	931	943	933	938
28	944	934	937	940	920	930	935	905	930	943	933	936
29	947	937	938	931	921	924	935	925	933	943	933	936
30	939	919	935	931	921	923	935	925	932	943	933	935
31	942	932	940	---	---	---	935	925	931	943	933	935
MONTH	947	907	923	968	920	943	945	905	929	945	905	935
		FEBRUARY			MARCH			APRIL			MAY	
1	943	933	933	920	910	918	925	895	906	925	915	920
2	942	922	931	921	911	916	915	845	893	925	915	919
3	932	932	932	922	912	915	915	865	885	926	916	920
4	942	932	933	923	913	920	904	874	890	926	916	919
5	932	922	932	944	914	921	924	894	910	927	917	922
6	942	932	932	925	915	922	924	894	910	927	917	923
7	932	922	931	927	917	923	913	893	906	927	917	923
8	942	922	932	928	918	926	933	913	919	928	918	924
9	941	911	931	929	919	926	923	913	922	928	918	924
10	941	921	931	930	920	928	932	912	922	928	918	923
11	931	921	930	931	921	929	922	912	920	929	919	928
12	931	921	931	932	922	927	922	912	920	939	919	929
13	941	921	931	933	923	931	931	911	923	940	920	929
14	931	931	931	944	924	933	931	921	927	940	920	929
15	941	921	931	945	925	933	931	921	925	930	910	920
16	930	920	930	937	927	932	930	920	925	931	921	922
17	930	920	929	938	928	933	930	910	921	921	911	919
18	940	920	929	939	929	935	920	910	919	921	911	919
19	940	930	931	940	930	934	921	911	919	922	912	917
20	930	920	929	940	910	927	921	911	918	922	912	917
21	911	901	905	939	899	924	921	911	917	922	912	916
22	912	902	909	938	919	932	922	912	920	923	913	919
23	913	903	909	929	899	916	922	912	920	923	913	916
24	914	904	910	928	888	908	923	913	918	913	893	905
25	915	905	912	918	878	906	923	913	918	914	894	907
26	917	907	915	928	898	912	923	913	918	924	904	911
27	918	908	914	927	907	918	924	914	917	915	905	913
28	919	909	916	927	877	900	924	914	918	925	915	922
29	---	---	---	926	906	916	924	914	917	925	915	921
30	---	---	---	926	906	917	925	915	918	926	906	917
31	---	---	---	926	896	908	---	---	---	926	906	916
MONTH	943	901	925	945	877	922	933	845	915	940	893	920

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	926	906	916	906	886	899	890	880	890	892	872	882
2	917	907	914	906	886	896	890	880	887	893	873	883
3	917	897	908	896	886	894	890	880	888	883	873	883
4	927	897	916	896	886	894	890	880	888	883	873	882
5	928	908	917	897	887	893	890	880	888	883	873	882
6	928	908	917	897	887	896	890	880	889	894	874	884
7	918	908	916	897	887	893	890	880	889	894	884	885
8	919	909	917	898	888	895	890	880	885	884	884	884
9	919	909	917	898	888	897	890	880	888	884	874	882
10	920	910	918	898	888	895	890	880	887	885	875	881
11	930	890	907	898	888	893	890	880	887	885	875	879
12	900	890	896	899	889	895	890	880	889	885	875	881
13	900	890	898	899	889	896	890	880	889	885	875	878
14	901	891	899	899	889	897	890	880	886	886	876	881
15	901	891	899	900	890	895	890	880	887	886	876	876
16	901	891	900	910	890	899	890	880	887	886	876	879
17	902	892	900	910	900	901	890	880	886	886	876	879
18	902	892	898	910	900	900	890	880	885	886	866	876
19	902	892	899	910	890	905	890	880	882	887	867	879
20	902	892	898	900	890	899	890	880	884	887	877	878
21	903	893	897	900	890	898	890	880	886	887	867	877
22	903	893	899	900	890	896	890	880	888	877	877	877
23	903	893	899	900	890	899	890	880	887	888	878	879
24	904	894	897	900	890	895	891	881	889	888	878	883
25	904	894	897	900	890	893	891	881	884	878	868	877
26	904	894	898	900	890	893	891	881	885	888	868	882
27	904	894	897	900	890	892	891	881	884	879	859	874
28	905	885	895	900	890	893	892	882	885	889	869	877
29	895	885	894	900	890	895	892	882	884	889	879	880
30	895	885	893	900	890	892	892	882	885	889	879	882
31	---	---	---	900	890	890	892	882	882	---	---	---
MONTH	930	885	904	910	886	896	892	880	886	894	859	880

YEAR MAXIMUM 968 MINIMUM 845 MEAN 915

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.5	20.0	20.0	16.0	15.5	15.5	14.5	14.5	14.5	11.5	11.0	11.5
2	20.0	20.0	20.0	16.0	16.0	16.0	14.5	14.5	14.5	11.0	11.0	11.0
3	20.0	20.0	20.0	16.0	16.0	16.0	14.5	14.0	14.5	11.0	11.0	11.0
4	20.5	19.5	20.0	16.0	16.0	16.0	14.0	14.0	14.0	11.0	11.0	11.0
5	20.0	19.5	20.0	16.5	16.0	16.5	14.5	14.0	14.0	11.0	11.0	11.0
6	20.0	19.5	19.5	16.5	16.5	16.5	14.0	14.0	14.0	11.0	11.0	11.0
7	20.0	19.5	20.0	16.5	16.0	16.5	14.0	14.0	14.0	11.0	11.0	11.0
8	20.0	20.0	20.0	16.5	16.0	16.0	14.0	14.0	14.0	11.0	11.0	11.0
9	20.0	19.5	20.0	16.5	16.0	16.5	14.5	14.0	14.0	11.0	10.5	11.0
10	20.0	19.5	19.5	16.0	16.0	16.0	14.0	14.0	14.0	11.0	10.5	11.0
11	19.5	19.5	19.5	16.0	16.0	16.0	14.0	14.0	14.0	11.0	10.5	11.0
12	20.0	19.5	19.5	16.0	16.0	16.0	14.5	14.0	14.0	10.5	10.5	10.5
13	20.0	19.5	19.5	16.0	16.0	16.0	14.0	13.5	14.0	10.5	10.5	10.5
14	19.5	19.0	19.5	16.0	16.0	16.0	14.0	13.0	13.5	10.5	10.5	10.5
15	19.0	18.5	19.0	16.0	16.0	16.0	13.5	13.0	13.5	10.5	10.0	10.5
16	18.5	18.5	18.5	16.0	16.0	16.0	13.5	13.0	13.0	10.5	10.5	10.5
17	18.5	18.0	18.0	16.0	15.5	16.0	13.0	13.0	13.0	10.5	10.0	10.5
18	18.0	17.0	17.5	16.0	15.5	15.5	13.0	12.5	12.5	10.5	10.0	10.0
19	17.0	17.0	17.0	16.0	16.0	16.0	12.5	12.5	12.5	10.5	10.0	10.0
20	17.0	16.5	16.5	16.0	15.5	16.0	12.5	12.5	12.5	10.5	10.0	10.5
21	16.5	16.0	16.5	16.0	15.5	16.0	12.5	12.0	12.0	10.5	10.0	10.5
22	16.0	15.5	16.0	16.0	15.5	16.0	12.0	12.0	12.0	10.5	10.5	10.5
23	15.5	15.5	15.5	16.0	16.0	16.0	12.0	11.5	12.0	10.5	10.5	10.5
24	15.5	15.0	15.5	16.0	15.5	16.0	11.5	11.5	11.5	11.0	10.5	11.0
25	15.5	15.0	15.0	16.0	15.5	15.5	11.5	11.5	11.5	11.0	11.0	11.0
26	15.5	15.0	15.0	15.5	15.5	15.5	11.5	11.5	11.5	11.5	11.0	11.0
27	15.5	15.0	15.5	15.5	15.5	15.5	11.5	11.5	11.5	11.5	11.0	11.5
28	15.5	15.5	15.5	15.5	15.0	15.0	11.5	11.5	11.5	11.5	11.5	11.5
29	15.5	15.5	15.5	15.0	15.0	15.0	11.5	11.5	11.5	11.5	11.5	11.5
30	15.5	15.5	15.5	15.0	14.5	14.5	11.5	11.5	11.5	11.5	11.5	11.5
31	15.5	15.5	15.5	---	---	---	11.5	11.5	11.5	11.5	11.0	11.5
MONTH	20.5	15.0	18.0	16.5	14.5	16.0	14.5	11.5	13.0	11.5	10.0	11.0

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.0	11.0	11.0	13.0	13.0	13.0	15.5	15.0	15.0	18.0	17.5	18.0
2	11.0	10.5	11.0	13.0	13.0	13.0	16.0	15.0	15.5	18.0	17.5	18.0
3	11.0	10.5	10.5	13.0	13.0	13.0	16.0	15.5	15.5	18.0	17.5	18.0
4	10.5	10.5	10.5	13.0	13.0	13.0	16.0	15.5	15.5	18.5	18.0	18.0
5	10.5	10.0	10.0	13.0	13.0	13.0	15.5	15.5	15.5	19.0	18.5	18.5
6	10.0	10.0	10.0	13.5	13.0	13.0	16.0	15.5	15.5	19.0	18.5	19.0
7	10.0	9.5	10.0	13.5	13.0	13.0	16.5	16.0	16.0	19.5	18.5	19.0
8	10.0	10.0	10.0	13.5	13.0	13.5	17.0	16.5	17.0	19.5	19.0	19.5
9	10.5	10.0	10.0	13.5	13.5	13.5	17.0	17.0	17.0	20.0	19.5	19.5
10	10.5	10.0	10.5	13.5	13.5	13.5	17.0	16.5	16.5	19.5	19.0	19.5
11	10.5	10.0	10.5	13.5	13.0	13.5	17.0	16.5	17.0	20.0	19.5	19.5
12	10.5	10.5	10.5	14.0	13.0	13.5	18.0	17.0	17.5	20.0	19.5	20.0
13	11.0	10.5	11.0	14.0	13.0	13.5	18.5	18.0	18.5	21.0	20.0	20.5
14	11.5	11.0	11.0	14.5	14.0	14.0	19.0	18.5	18.5	21.0	20.5	20.5
15	11.5	11.0	11.5	14.5	14.0	14.0	18.5	18.0	18.5	20.5	20.0	20.0
16	12.0	11.5	11.5	14.5	14.0	14.5	18.0	18.0	18.0	20.0	20.0	20.0
17	12.0	12.0	12.0	14.5	14.0	14.5	18.0	18.0	18.0	20.5	20.0	20.0
18	12.5	12.0	12.0	15.0	14.0	14.5	18.0	18.0	18.0	20.5	20.0	20.0
19	12.5	12.0	12.5	15.0	14.5	15.0	18.0	17.5	18.0	20.5	20.0	20.0
20	12.5	12.0	12.5	15.0	15.0	15.0	18.0	17.5	18.0	20.5	20.0	20.0
21	12.5	12.0	12.5	15.0	15.0	15.0	18.0	17.5	18.0	21.0	20.0	20.5
22	12.5	12.5	12.5	15.0	15.0	15.0	18.0	17.5	18.0	21.0	20.5	21.0
23	12.5	12.5	12.5	15.5	15.0	15.0	18.0	17.5	18.0	21.0	21.0	21.0
24	12.5	12.5	12.5	15.5	15.0	15.5	18.0	17.5	18.0	21.0	20.5	21.0
25	13.0	12.5	12.5	15.0	15.0	15.0	18.5	17.5	18.0	21.0	20.5	21.0
26	13.0	12.5	12.5	15.0	15.0	15.0	18.5	17.5	18.0	21.0	20.5	20.5
27	13.0	12.5	13.0	15.0	15.0	15.0	18.0	17.5	17.5	21.0	20.5	21.0
28	13.0	12.5	13.0	15.0	15.0	15.0	17.5	17.5	17.5	21.0	21.0	21.0
29	---	---	---	15.5	15.0	15.0	17.5	17.0	17.5	21.5	21.0	21.5
30	---	---	---	15.0	15.0	15.0	17.5	17.0	17.5	22.0	21.5	21.5
31	---	---	---	15.5	15.0	15.0	---	---	---	22.0	21.0	21.5
MONTH	13.0	9.5	11.5	15.5	13.0	14.0	19.0	15.0	17.0	22.0	17.5	20.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.5	21.5	21.5	24.0	23.5	23.5	23.0	22.0	22.5	23.5	23.0	23.0
2	21.5	21.0	21.0	24.0	23.5	23.5	23.0	22.5	23.0	23.5	23.0	23.0
3	21.5	21.0	21.0	23.5	23.0	23.5	23.0	22.0	22.5	23.5	22.5	23.0
4	21.5	21.0	21.0	23.5	22.5	23.0	23.0	22.5	22.5	23.0	22.5	23.0
5	21.0	21.0	21.0	23.0	22.5	23.0	22.5	22.5	22.5	23.0	23.0	23.0
6	21.5	21.0	21.0	23.0	22.5	23.0	22.5	22.0	22.5	23.5	23.0	23.0
7	21.5	21.5	21.5	23.5	22.5	23.0	22.5	22.0	22.5	23.5	22.5	23.0
8	22.0	21.5	21.5	24.0	23.0	23.5	22.5	22.0	22.0	22.5	22.0	22.5
9	22.0	21.5	21.5	23.5	23.0	23.5	22.5	22.0	22.5	22.5	22.0	22.0
10	22.0	21.5	22.0	23.5	23.0	23.5	22.5	22.0	22.5	22.0	21.5	21.5
11	22.5	22.0	22.0	23.5	23.0	23.0	22.5	21.5	22.0	21.5	21.0	21.5
12	22.5	22.5	22.5	24.0	23.0	23.5	23.0	22.5	22.5	21.5	21.0	21.5
13	23.0	22.5	23.0	23.5	22.5	23.0	23.0	22.5	22.5	21.5	21.0	21.5
14	23.0	23.0	23.0	23.0	22.5	22.5	23.0	22.5	22.5	21.5	21.0	21.0
15	23.5	23.0	23.0	23.0	22.5	23.0	23.0	22.5	22.5	21.5	21.0	21.0
16	23.5	23.0	23.5	23.5	22.5	23.0	23.0	22.5	22.5	21.0	21.0	21.0
17	23.5	23.0	23.5	23.0	22.5	22.5	23.0	22.5	22.5	21.0	20.5	21.0
18	23.5	23.0	23.5	23.0	22.5	22.5	22.5	22.5	22.5	21.0	20.5	21.0
19	23.5	23.0	23.0	23.5	23.0	23.5	22.5	22.0	22.5	21.5	20.5	21.0
20	23.5	23.0	23.5	23.5	23.0	23.5	22.5	22.0	22.5	21.5	21.0	21.0
21	23.5	23.0	23.5	23.5	23.0	23.5	23.0	22.5	22.5	21.5	21.0	21.0
22	23.5	23.0	23.0	23.0	22.5	23.0	23.0	22.5	23.0	21.0	21.0	21.0
23	23.5	23.5	23.5	23.0	22.5	22.5	24.0	23.0	23.5	21.5	21.0	21.0
24	23.5	23.0	23.0	23.0	22.0	22.5	24.0	23.5	23.5	21.5	21.5	21.5
25	23.0	22.5	23.0	23.0	22.0	22.5	23.5	23.0	23.0	21.5	21.0	21.5
26	24.5	23.0	23.5	23.0	22.0	22.5	23.5	22.5	23.0	22.0	21.0	21.5
27	24.5	23.5	24.0	23.0	23.0	23.0	23.0	22.5	23.0	22.0	21.0	21.0
28	23.5	23.0	23.0	23.5	22.5	22.5	23.0	22.5	23.0	21.5	21.0	21.0
29	23.0	22.5	23.0	23.0	22.5	22.5	23.5	23.0	23.5	21.5	21.0	21.0
30	23.5	23.0	23.0	23.0	22.0	22.5	23.5	23.0	23.5	21.5	21.0	21.5
31	---	---	---	23.0	22.5	23.0	23.5	23.0	23.0	---	---	---
MONTH	24.5	21.0	22.5	24.0	22.0	23.0	24.0	21.5	22.5	23.5	20.5	21.5
YEAR	24.5	9.5	17.5									

09428500 COLORADO RIVER INDIAN RESERVATION MAIN CANAL NEAR PARKFR, AZ

LOCATION.--Two gages, lat 34°10'04", long 114°16'33", in SE¼NW¼ sec.31, T.10 N., R.19 W., Gila and Salt River meridian, La Paz County, Hydrologic Unit 15030104. Forebay gage, on left wall of canal intake, 90 ft upstream from diversion gates at Arizona end of Headgate Rock Dam. Tailrace gage, on right bank of canal 250 ft downstream from gates. Both gages are on Colorado River Indian Reservation 1.7 mi northeast of Parker and 14 mi downstream from Parker Dam.

PERIOD OF RECORD.--January 1915 to current year (prior to January 1937, fiscal year diversions only; January 1937 to September 1954, monthly diversions only).

REVISED RECORDS.--WSP 1513: 1915-36.

GAGE.--Water-stage recorders above and below intake gates to record head and recorder to show gate openings (since Oct. 1, 1972), with supplementary tape gages read daily and at time of each gate change (prior to Oct. 1, 1972, tape gages only). Datum of gages is 350.00 ft, datum in use locally, or 350.51 ft above National Geodetic Vertical Datum of 1929. Normal operating level of forebay is 364.3 ft; prior to July 9, 1962, normal operating level of forebay was 362.9 ft, datum in use locally. Prior to October 1954, discharge computed by various methods as described in WSP 1313.

REMARKS.--No estimated daily discharges. Records good. Daily diversions computed on basis of head on intake gates and gate openings. Records show water diverted to project and surface return flows to Colorado River through two wasteways and two drains; three of these are equipped with water-stage recorders.

COOPERATION.--Log of canal intake gate opening (supplementary record) furnished by Bureau of Indian Affairs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,940 ft^3/s May 26, 1982; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	682	443	170	.00	196	831	1150	1130	1320	1270	1340	953
2	662	434	170	.00	190	797	1150	1060	1250	1300	1350	947
3	651	478	200	.00	133	650	1120	1080	1180	1310	1360	1000
4	657	570	221	125	182	707	1090	1100	1150	1340	1320	1240
5	620	568	192	188	271	833	1060	1040	1150	1340	1350	1330
6	548	556	143	188	330	874	1010	1040	1160	1340	1430	1310
7	411	565	128	137	385	976	958	1110	1190	1310	1470	1250
8	465	569	43	52	395	1000	989	1150	1330	1290	1470	1110
9	601	560	.00	20	382	978	1070	1160	1260	1300	1500	1090
10	620	548	.00	20	307	917	1090	1110	1160	1340	1450	1080
11	607	470	.00	20	348	942	1120	1040	1310	1340	1330	1080
12	596	359	.00	20	319	1040	1150	821	1360	1340	1370	1060
13	532	398	.00	20	431	1050	1190	888	1390	1340	1400	1000
14	477	445	.00	20	448	1040	1210	972	1350	1210	1460	822
15	508	469	.00	20	388	1040	1200	1060	1010	1270	1500	737
16	537	494	.00	20	435	1010	1160	1170	775	1380	1500	881
17	537	457	.00	20	507	889	1160	1200	693	1390	1450	941
18	633	377	.00	20	424	885	1030	1200	871	1370	1350	800
19	634	386	85	20	496	884	877	1160	1020	1370	1320	534
20	559	395	47	20	572	921	820	1120	1090	1290	1330	446
21	521	395	.00	20	559	994	732	1150	1080	1140	1330	392
22	596	302	.00	20	622	1030	784	1170	1100	1160	1330	277
23	638	209	.00	20	624	1040	824	1130	1240	1260	1340	388
24	625	190	46	20	620	988	927	1110	1330	1330	1270	537
25	627	188	.00	20	632	1010	979	1060	1320	1340	1140	577
26	600	185	31	20	660	1010	1050	968	1300	1330	1080	595
27	519	190	21	20	685	1070	1080	997	1290	1320	1070	440
28	417	193	.00	398	762	1060	983	1180	1250	1220	1070	339
29	446	188	.00	235	---	1060	1050	1190	1240	1180	994	439
30	502	190	.00	85	---	999	1140	1200	1240	1260	965	412
31	475	---	.00	208	---	1030	---	1270	---	1320	964	---
TOTAL	17503	11771	1497.00	1996.00	12303	29565	31153	34036	35409	40300	40603	24007
MEAN	565	392	48.3	64.4	439	954	1038	1098	1180	1300	1310	800
MAX	682	570	221	398	762	1070	1210	1270	1390	1390	1500	1330
MIN	411	185	.00	.00	133	650	732	821	693	1140	964	277
AC-FT	34720	23350	2970	3960	24400	58640	61790	67510	70230	79940	80540	47620
(*)	26150	22360	17870	15020	17160	23710	27780	27110	25980	26170	27810	25200

CAL YR 1984 TOTAL 295382.00 MEAN 807 MAX 1500 MIN .00 AC-FT 585900 (*) 312400
WTR YR 1985 TOTAL 280143.00 MEAN 768 MAX 1500 MIN .00 AC-FT 555700 (*) 282300

* Return surface flow, in acre-feet, to Colorado River.

09429000 PALO VERDE CANAL NEAR BLYTHE, CA

LOCATION.--Lat 33°43'55", long 114°30'40", in NW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, Riverside County, Hydrologic Unit 15030104, at canal intake structure on west side of Palo Verde diversion dam, 10 mi northeast of Blythe and 44 mi downstream from Headgate Rock Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1922 to December 1923, January 1925 to current year (prior to October 1950, monthly discharge only).

REVISED RECORD.--WSP 1213: 1946-48.

GAGE.--Recording gages above and below intakes to record head. Since May 18, 1964, recorder to show gate openings. Datum of gage is: Forebay gage, National Geodetic Vertical Datum of 1929; tailrace gage, 274.13 ft, NGVD. Aug. 7, 1950, to Nov. 30, 1952, water-stage recorder on tailrace and auxiliary recorder 0.5 mi downstream and Dec. 1, 1952, to Oct. 28, 1957, recording gage above and below former intake structure 0.2 mi upstream, at different datums.

REMARKS.--Estimated daily discharges: Jan. 2-4. Records good. Daily diversions computed on basis of head on intake gates and gate openings. Records published herein represent flow diverted from Colorado River for irrigation. Return flows to Colorado River are measured by 10 wasteways and drains extending throughout the project; 5 of these are equipped with water stage recorder and Parshall flume, 3 are equipped with Sparling flowmeters. Return flows have not been subtracted; combined monthly return flows are given in table below.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,360 ft^3/s July 30, 1981; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	895	519	.00	846	1450	1480	1690	1670	1700	1920	1440
2	927	865	468	.00	705	1370	1570	1700	1660	1680	1870	1470
3	909	782	484	.00	631	1180	1600	1630	1700	1820	1960	1590
4	911	739	414	141	628	1380	1630	1670	1610	1720	1830	1710
5	876	824	430	229	667	1320	1640	1490	1720	1810	1870	1750
6	801	751	389	235	661	1350	1540	1660	1660	1820	1750	1750
7	791	843	389	206	688	1360	1220	1650	1750	1650	1760	1650
8	855	773	321	196	695	1440	1560	1750	1880	1740	1740	1440
9	815	772	329	249	668	1470	1830	1720	1890	1730	1830	1510
10	845	731	310	235	608	1350	1980	1730	1890	1740	1840	1480
11	784	658	280	346	724	1430	1940	1620	1940	1710	1780	1420
12	776	717	302	349	741	1590	1860	1420	1940	1740	1800	1430
13	918	654	286	268	880	1380	1720	1630	1930	1720	1760	1490
14	727	632	293	273	1020	1320	1560	1670	1910	1600	1830	1490
15	788	687	303	329	1210	1340	1700	1680	1730	1700	1690	1380
16	802	704	292	372	1190	1280	1860	1790	1650	1820	1700	1460
17	820	659	284	293	1140	1050	1920	1740	1840	1760	1680	1490
18	757	560	298	351	1210	1090	1870	1580	1830	1850	1670	997
19	757	710	291	568	1320	1130	1750	1340	1870	1750	1840	745
20	739	775	288	556	1290	1270	1690	1470	1840	1740	1860	731
21	696	723	288	656	1260	1200	1450	1680	1760	1660	1880	680
22	724	519	326	674	1250	1220	1540	1640	1750	1710	1860	663
23	688	501	318	643	1180	1280	1570	1510	1650	1840	1940	824
24	804	492	316	708	1040	1170	1630	1450	1730	2060	1830	775
25	809	461	316	812	1250	1160	1650	1390	1720	2160	1600	840
26	812	473	328	726	1320	1410	1700	1350	1680	1880	1640	951
27	827	466	271	666	1390	1510	1660	1390	1650	1750	1640	653
28	725	506	279	733	1440	1460	1510	1260	1700	1680	1540	564
29	739	526	280	776	---	1430	1510	1340	1680	1750	1590	632
30	737	534	279	915	---	1500	1680	1600	1660	1870	1560	621
31	833	---	188	887	---	1410	---	1670	---	1940	1480	---
TOTAL	25142	19932	10159	13392.00	27652	41300	49840	48910	52890	55100	54540	35626
MEAN	811	664	328	432	988	1332	1661	1578	1763	1778	1759	1187
MAX	1150	895	519	915	1440	1590	1980	1790	1940	2160	1960	1750
MIN	688	461	188	.00	608	1050	1220	1260	1610	1600	1480	564
AC-FT	49870	39540	20150	26560	54850	81920	98850	97010	104900	109300	108200	70660
(*)	42410	38860	38860	30460	30020	40280	40760	43890	42740	46380	47730	48010

CAL YR 1984 TOTAL 420925.00 MEAN 1150 MAX 1830 MIN .00 AC-FT 834900
WTR YR 1985 TOTAL 434483.00 MEAN 1190 MAX 2160 MIN .00 AC-FT 861800

* Return flows, in acre-feet, to Colorado River.

09429000 PALO VERDE CANAL NEAR BLYTHE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1970 to September 1985 (discontinued).

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS (MG/L AS CACO3) (00900)
OCT 1984 19...	1000	857	920	8.20	18.0	18.0	760	9.4	100	270
NOV 29...	1000	530	900	--	14.0	14.5	750	10.3	103	280
DEC 20...	1000	314	920	8.30	10.0	10.0	755	10.7	96	290
JAN 1985 22...	1030	750	1030	8.10	11.0	11.0	760	10.6	97	310
FEB 22...	0930	1350	950	8.10	18.0	13.0	745	11.1	--	290
MAR 21...	1100	1250	920	8.00	22.0	16.0	759	10.1	103	290
APR 18...	0900	2000	910	8.00	17.0	17.5	760	9.0	95	320
MAY 15...	0945	1680	930	7.80	28.5	22.0	756	8.8	102	300
JUN 12...	1635	1940	920	8.00	41.5	24.0	754	9.0	108	290
JUL 18...	0900	1800	910	8.00	37.5	25.0	754	8.7	107	280
AUG 22...	1630	1940	900	7.90	41.0	25.0	756	8.8	108	290
SEP 05...	1330	1790	890	7.90	29.0	23.0	760	8.8	103	270

DATE	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT 1984 19...	140	67	26	85	2	5.3	160	0	131	250
NOV 29...	150	72	25	79	2	3.7	--	--	--	240
DEC 20...	160	73	26	80	2	3.8	156	0	128	240
JAN 1985 22...	190	80	26	80	2	3.8	142	0	116	250
FEB 22...	160	75	25	78	2	4.0	156	0	128	240
MAR 21...	170	75	26	82	2	4.1	150	0	123	230
APR 18...	190	81	28	89	2	4.2	154	0	126	250
MAY 15...	180	77	26	81	2	4.0	145	0	119	240
JUN 12...	160	74	26	79	2	4.1	156	0	128	230
JUL 18...	140	72	25	77	2	4.2	173	0	142	240
AUG 22...	160	73	25	77	2	3.9	152	0	125	230
SEP 05...	150	70	24	75	2	3.8	154	--	126	230

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	BORON, DISSOLVED (UG/L AS B) (01020)	IRON, DISSOLVED (UG/L AS FE) (01046)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT 1984 19...	67	0.3	8.2	590	0.8	0.35	120	4	--	--
NOV 29...	65	0.3	8.0	570	0.78	0.29	110	4	8	12
DEC 20...	64	0.3	8.6	570	0.78	0.28	120	10	5	4.6
JAN 1985 22...	65	0.3	7.9	580	0.79	0.28	110	3	4	8.3
FEB 22...	64	0.3	8.2	570	0.78	0.30	150	7	7	26
MAR 21...	65	0.3	8.9	570	0.77	0.25	120	<3	--	--
APR 18...	66	0.3	8.6	600	0.82	0.21	110	<3	11	59
MAY 15...	65	0.3	8.0	570	0.78	0.22	120	<3	--	--
JUN 12...	63	0.3	8.4	560	0.76	0.22	100	4	--	--
JUL 18...	64	0.3	8.7	580	0.78	0.22	110	4	--	--
AUG 22...	62	0.3	8.9	550	0.75	0.19	110	<3	--	--
SEP 05...	62	0.2	8.5	550	0.75	0.21	110	<3	--	--

< Actual value is known to be less than value shown.

09429010 COLORADO RIVER AT PALO VERDE DAM, AZ-CA

LOCATION.--Lat 33°43'55", long 114°30'40", in NW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, in California, Riverside County, Hydrologic Unit 15030104, on west side of Palo Verde Diversion Dam, 10 mi northeast of Blythe, Calif., and 44 mi downstream from Headgate Rock Dam.

DRAINAGE AREA.--186,200 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--April 1969 to current year. If records (available in files of Tucson District office) for the two Colorado River Indian Reservation drains entering below Palo Verde Dam are added to records for this station, records equivalent to those published 1956-69 as "Colorado River below Palo Verde Dam" can be obtained.

GAGE.--Two water-stage recorders, one above and one below dam, to record head on gates, and water-stage recorder to record gate opening. Supplementary water-stage recorder above dam operated by Geological Survey and supplementary water-stage recorder below dam operated by Palo Verde Irrigation District. Datum of gages is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Many diversions above station for irrigation, municipal, and industrial uses. Flow regulated by Lake Mead, Lake Mohave, and Lake Havasu.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 42,300 ft^3/s June 30, 1983; minimum daily, 1,060 ft^3/s Nov. 25, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 25,100 ft^3/s July 28, Aug. 26; minimum daily, 15,600 ft^3/s Apr. 10-12, May 2, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23800	23000	23500	23900	22400	23700	17900	15700	22900	22400	22400	22100
2	24100	23000	23800	24600	24900	23200	18200	15600	23100	22600	22100	22300
3	24100	23000	24200	24800	24900	23100	18200	15700	23400	22500	22100	22300
4	24200	23000	24300	24300	24900	23500	17400	15700	23300	22600	22000	21100
5	24200	23000	24300	24100	24700	23300	16600	15900	22900	22600	21700	20600
6	24300	23000	24400	24000	24500	20400	16700	15800	22900	22500	21100	20700
7	24400	23000	24300	23900	24100	18900	16700	15800	22800	23000	20900	20800
8	24400	22900	24400	23900	23100	18500	16500	15700	22400	22800	21000	21100
9	24300	22700	24500	23900	23900	18400	15900	15600	22400	22100	21000	21300
10	24500	22900	24400	23800	24300	18500	15600	15700	22500	22000	20900	21200
11	24400	23000	24900	23900	24300	18500	15600	15900	22400	22000	21100	19600
12	24500	23100	24400	24100	24200	18400	15600	16500	22300	21900	21100	19500
13	24300	23300	24400	24000	23800	18800	15800	16900	22300	21900	21400	19500
14	24600	23200	24200	24000	23800	18800	15900	18300	22100	22200	22700	19600
15	24600	23100	24200	24100	22900	18800	16200	18300	22400	22200	22600	19900
16	24500	22900	24200	24000	23700	19200	17400	18100	22700	22000	22600	19800
17	24500	23000	24300	24100	23200	19200	17300	18200	22500	22100	22500	19900
18	24400	23200	24200	24100	23300	19000	17500	20000	22300	22200	22600	20400
19	24300	23000	24100	23600	23200	19100	17700	20600	22100	22200	22300	21000
20	21500	22900	23600	23500	23100	19200	17800	20700	22100	22200	21800	21100
21	21100	22900	23400	23300	23700	19200	18100	20500	22100	22700	22000	20100
22	21200	23200	23300	23200	24200	19200	18100	20400	22100	22600	22300	20000
23	22900	23400	23200	23100	24300	19300	18100	20800	22400	22400	22500	19800
24	22900	23500	23200	22900	24200	19500	17900	21000	22400	22100	23700	19700
25	22800	23400	23100	22800	24100	18900	17400	21000	22300	22500	24800	19400
26	22800	23400	23200	22700	24100	17900	16600	21200	22300	24000	25100	19300
27	22900	23400	23400	22800	23900	16500	16600	21400	22400	24900	24900	19700
28	23000	23400	23200	22700	23700	17000	16700	21500	22400	25100	23800	19900
29	23100	23400	23200	21900	---	17900	16500	22600	22300	24900	23900	19800
30	22900	23400	23100	22400	---	17900	15900	22900	22500	23100	23800	19700
31	23100	---	23700	22100	---	18100	---	22800	---	22500	23000	---
TOTAL	732600	693600	740600	730500	669400	601900	508500	576800	675000	702800	695700	611300
MEAN	23630	23120	23890	23570	23910	19420	16950	18610	22500	22670	22440	20380
MAX	24600	23500	24900	24800	24900	23700	18200	22900	23400	25100	25100	22300
MIN	21100	22700	23100	21900	22400	16500	15600	15600	22100	21900	20900	19300
AC-FT	1453000	1376000	1469000	1449000	1328000	1194000	1009000	1144000	1339000	1394000	1380000	1213000

CAL YR 1984 TOTAL 9241900 MEAN 25250 MAX 29500 MIN 20700 AC-FT 18330000
WTR YR 1985 TOTAL 7938700 MEAN 21750 MAX 25100 MIN 15600 AC-FT 15740000

09429280. CIBOLA LAKE INLET NEAR CIBOLA, AZ.

LOCATION.--Lat 33°15'11", long 114°40'05", in SW¼NE¼ sec.18, T.2 S., R.23 W., La Paz County, Hydrologic Unit 15030104, in Cibola National Wildlife Refuge, below levee on left bank Colorado River at north end of Cibola Lake, 4.4 mi south of Cibola.

PERIOD OF RECORD.--December 1974 to current year (monthly discharge only).

GAGE.--None. Prior to July 30, 1982, two water-stage recorders; one recorded stage and the other recorded deflection-meter readings from deflection vane located in concrete flume.

REMARKS.--Records good. Record shows amount of water diverted from Colorado River to Cibola Lake.

09429290. CIBOLA LAKE OUTLET NEAR CIBOLA, AZ.

LOCATION.--Lat 33°13'19", long 114°40'16", in NW¼SE¼ sec.30, T.2 S., R.23 W., La Paz County, Hydrologic Unit 15030104, in Cibola National Wildlife Refuge, at south end of Cibola Lake outlet to Colorado River, 6.5 mi south of Cibola.

PERIOD OF RECORD.--December 1974 to current year (monthly discharge only).

GAGE.--Water-stage recorder and cipolletti weir or stop logs in 6-ft concrete flume. Datum of gage is 204.17 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Record shows amount of water returned to Colorado River through controlled outlet. In water years 1976, 1977, and 1979 part of the return flow included in the record was from local runoff.

MONTHLY DISCHARGE, IN ACRE-FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	Cibola Lake Inlet 09429280	Cibola Lake Outlet 09429290
October	0	0
November	0	0
December	0	0
CAL YR 1984	0	0
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
WTR YR 1985	0	0

09429300 COLORADO RIVER BELOW CIBOLA VALLEY, AZ

LOCATION.--Lat 33°13'16", long 114°40'18", in NE¼SW¼ sec.30, T.2 S., R.23 W., Gila and Salt River meridian, La Paz County, Hydrologic Unit 15030104, on left bank 6.7 mi south of Cibola, 38 mi upstream from Imperial Dam, 39.7 mi downstream from Ehrenberg, Ariz., 52.1 mi downstream from Palo Verde diversion dam near Blythe, Calif., and at mile 620 on Colorado River Profile Survey map.

DRAINAGE AREA.--187,800 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--April 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lakes Mead, Mohave, and Havasu. Many diversions above station for irrigation, municipal, and industrial uses. See sta 09429000 for return flows from Palo Verde Irrigation District, which enter between sta 09429010 and this station. A portion of the return flows from Colorado River Indian Reservation also enters between these two stations.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,700 ft^3/s Aug. 18, 1983, gage height, 16.57 ft; minimum daily discharge, 1,900 ft^3/s Jan. 18, 1974; minimum gage height, about 4.1 ft, Jan. 18, 1974, based on minimum observed gage height of 4.25 ft Jan. 14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 25,500 ft^3/s Dec. 12; minimum daily, 17,000 ft^3/s Apr. 11, May 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24800	23600	24300	24800	23700	24400	18800	17400	22900	23300	23600	23500
2	24800	23600	24400	24700	24000	24400	19000	17400	23000	23300	23500	23700
3	24800	23600	24500	24700	24800	24400	19200	17300	23000	23400	23400	23600
4	24900	23600	24600	24500	25000	24300	19200	17300	23100	23400	23400	23200
5	24900	23600	24700	24200	24900	24300	18300	17200	23100	23500	23500	22800
6	24900	23600	24600	24200	24800	23800	17600	17600	23100	23400	23400	22600
7	25000	23600	24700	24400	24700	22700	17800	17400	23200	23400	23400	22500
8	25100	23600	24900	24400	24300	21700	18000	17300	23100	23600	23200	22600
9	25100	23500	25100	24400	24000	21300	17700	17200	23000	23500	23200	22800
10	25100	23500	25100	24200	24400	21100	17200	17000	23000	23400	23100	22800
11	25100	23600	25400	24100	24800	21100	17000	17100	23100	23400	23000	22600
12	25100	23700	25400	24000	24900	21000	17100	17500	23000	23400	23000	21800
13	25100	23700	25300	24000	24900	20800	17100	17800	23000	23400	23100	21500
14	25000	23700	25100	24000	24800	20900	17200	18700	22900	23500	23000	21400
15	25100	23700	25100	24100	24600	20800	17400	19600	23000	23600	22800	21500
16	25100	23700	25100	24000	24700	20800	18000	19700	23200	23500	22900	21700
17	25000	23600	25200	24000	24700	20900	18800	19600	23300	23400	22900	21500
18	24800	23700	25200	24100	24800	20800	18800	19900	23200	23500	23000	21500
19	24800	23600	25200	24100	24900	20600	19000	21200	23100	23600	23200	22100
20	24300	23700	25000	24100	24800	20600	19200	21700	23000	23800	23000	22300
21	23200	23600	24900	24100	24800	20500	19400	21600	23000	23800	23000	22300
22	23000	23600	24800	24000	24800	20400	19700	21400	23100	23900	23000	21600
23	23100	24000	24500	24000	24800	20300	19500	21500	23100	23900	23000	21500
24	23600	24100	24500	24000	24700	20300	19500	21700	23200	23700	23100	21300
25	23700	24100	24400	23900	24900	20300	19300	21700	23200	23600	23100	21100
26	23700	24100	24300	23900	24800	19800	18700	21800	23200	23600	23300	20900
27	23600	24200	24400	24000	24800	18300	18100	22000	23200	23700	23400	20900
28	23600	24200	24400	24000	24900	17600	18200	22000	23200	23700	23400	21300
29	23800	24200	24400	23900	---	17900	18400	22100	23200	23800	23400	21200
30	23700	24300	24400	23700	---	18700	18000	22700	23200	23800	23500	21100
31	23700	---	24400	23800	---	18700	---	22700	---	23600	23500	---
TOTAL	757500	713000	768400	748400	691000	653500	551300	607100	692900	730500	719300	661200
MEAN	24440	23770	24790	24140	24680	21080	18380	19580	23100	23560	23200	22040
MAX	25100	24300	25400	24800	25000	24400	19700	22700	23300	23900	23600	23700
MIN	23000	23500	24300	23700	23700	17600	17000	17000	22900	23300	22800	20900
AC-FT	1503000	1414000	1524000	1484000	1371000	1296000	1094000	1204000	1374000	1449000	1427000	1311000

CAL YR 1984 TOTAL 9610000 MEAN 26260 MAX 30700 MIN 22800 AC-FT 19060000
WTR YR 1985 TOTAL 8294100 MEAN 22730 MAX 25400 MIN 17000 AC-FT 16450000

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA
(National stream-quality accounting network, radiochemical, and tritium network station)

LOCATION.--Lat 32°52'59", long 114°27'55", at Imperial Dam. The Arizona end of the dam is in SW¼NW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, Yuma County, Hydrologic Unit 15030104; the California end is in NW¼SW¼ sec.9, T.15 S., R.24 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030104. Imperial Dam is 5 mi upstream from Laguna Dam, 15 mi northeast of Yuma, Ariz., 90 mi downstream from Palo Verde Dam, and 147 mi downstream from Parker Dam.

DRAINAGE AREA.--188,500 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1903-34 (yearly discharge only, published in WSP 1313), July 1934 to current year (monthly discharge only October 1942 to September 1979). Prior to October 1942 published as "near Picacho, Calif." October 1942 to September 1971 published as "at Imperial Dam" (monthly discharge shown as "flow reaching Imperial Dam," listed as supplement to "flow passing Imperial Dam").

GAGE.--None. This record is synthesized from records of several other stations (see REMARKS). July 13, 1934, to Sept. 30, 1942, water-stage recorder at site 14.5 mi upstream at datum 167.38 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records show flow of Colorado River reaching Imperial Dam, and are based on combined daily total flow of Colorado River below Imperial Dam (sta 09429500), All-American Canal near Imperial Dam (sta 09523000), Gila Gravity Main Canal at Imperial Dam (sta 09522500), and diversions to Mittry Lake (sta 09522400). Records for 1903-34 and for October 1942 to September 1960 were computed as combined flow of Colorado River at Yuma (sta 09521000) and the canals diverting at Imperial and Laguna Dams, less the flow of Gila River near Dome (sta 09520500); for some of these periods drainage and waste return flows and channel losses between the gaging stations and Imperial Dam were considered, and for other periods they were neglected. Records for October 1960 to September 1979 are based on combined monthly total flow of same stations on which daily flows are currently based. Records for July 1934 to September 1942 show daily discharge of Colorado River at gaging station near Picacho, Calif., water withdrawals, and diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas. Diversions to Mittry Lake, which began June 23, 1970, are included in river records in table below. Additional regulation, beginning Jan. 31, 1966, to equalize supplies for downstream water users, is provided by pumped storage in reservoir on Senator Wash, about 2 mi upstream from Imperial Dam. Monthend contents of Senator Wash Reservoir - capacity, 13,840 acre-ft - is given in table below.

COOPERATION.--Records of Sparling meter readings of diversion to Mittry Lake and contents of Senator Wash Reservoir furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF 1934-85.--Maximum discharge, 40,800 ft^3/s Sept. 5, 1939; minimum, 538 ft^3/s Aug. 3, 1934; minimum daily since regulation of Hoover Dam began, 1,450 ft^3/s Feb. 17, 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25000	24000	24300	24300	23000	24400	18700	17700	22500	22800	23200	23500
2	25200	23700	24400	24800	23300	24200	18700	17000	22700	23000	23100	23700
3	25100	23800	24600	25100	23800	24100	18700	16700	23100	23000	22700	23900
4	24900	23700	24500	24800	25500	24400	18900	16600	23000	23000	22800	23900
5	25100	23600	24600	24300	25900	24600	18900	16600	23100	22900	23000	23800
6	24700	23900	24600	24000	26200	23900	18200	16700	23100	22700	23100	23300
7	24900	24000	24900	23900	26000	23300	17400	17000	23000	23000	23300	22500
8	25000	24000	24500	24200	25500	22000	17300	17100	22400	23200	23100	22300
9	25000	23800	24700	24300	25100	20900	17300	16800	22700	23200	22900	22700
10	25100	23600	24900	24300	24400	20200	17500	16700	22600	23300	22600	22800
11	25100	23200	24800	24200	25300	20100	16900	16600	22600	23200	22800	22700
12	24800	23700	25200	24100	25400	20100	16500	16800	22800	23100	23000	22800
13	24800	23700	25500	24100	25500	20100	16500	16900	22700	22900	23200	22100
14	24900	23700	25100	24300	25300	20200	16500	17200	22500	22900	23200	21200
15	25200	23800	25000	24200	25100	20200	16800	18000	22300	23100	23300	21200
16	25200	24100	24900	24100	24200	20000	17200	18700	22200	23100	23100	21000
17	25200	23800	25100	24000	24300	20200	17200	19100	22700	23200	22800	21300
18	25100	23700	25100	23800	24600	20300	18200	19000	22700	23400	23000	21700
19	25000	24100	25200	23600	24400	20000	18500	19100	22800	23300	23100	21500
20	24800	24100	25100	23800	24500	20100	18400	19900	22700	23100	23300	21700
21	24500	24200	24800	23800	24300	20100	18900	20800	22600	23200	23400	22000
22	22700	24000	24400	23600	24600	19800	18900	21300	22200	23500	23400	22100
23	22100	24100	24300	23600	24600	19600	19300	21500	22300	23300	23200	21900
24	22200	24100	24400	23700	24500	19600	19500	21200	22800	23500	23100	21400
25	23200	24400	24300	23600	24300	19800	19200	21200	22700	23400	23300	21200
26	23600	24600	24400	23400	24300	19900	19000	21500	22700	23200	23300	20900
27	23500	24600	24400	23600	24500	19500	18400	21600	22800	22600	23400	20800
28	23300	24600	24800	23300	24400	18200	17900	21800	22700	22800	23600	20700
29	23800	24600	24900	23700	---	17200	17700	21900	22400	23200	23800	21000
30	23800	24700	24700	23600	---	17400	17800	22100	22600	23300	23700	21200
31	23900	---	24500	23000	---	18100	---	22300	---	23400	23400	---
TOTAL	756700	719900	766900	743100	692800	642500	540900	587400	680000	716800	718200	662800
MEAN	24410	24000	24740	23970	24740	20730	18030	18950	22670	23120	23170	22090
MAX	25200	24700	25500	25100	26200	24600	19500	22300	23100	23500	23800	23900
MIN	22100	23200	24300	23000	23000	17200	16500	16600	22200	22600	22600	20700
AC-FT	1501000	1428000	1521000	1474000	1374000	1274000	1073000	1165000	1349000	1422000	1425000	1315000
(*)	6871	6881	6703	6910	5335	6913	6687	6478	6855	6526	6803	6088
(**)	861	657	840	738	666	676	655	676	714	738	738	714

CAL YR 1984 TOTAL 9633300 MEAN 26320 MAX 31400 MIN 22100 AC-FT 19110000
WTR YR 1985 TOTAL 8228000 MEAN 22540 MAX 26200 MIN 16500 AC-FT 16320000

* Monthend contents, in acre-feet, for Senator Wash Reservoir.
** Diversion, in acre-feet, to Mittry Lake (09522400).

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

WATER-QUALITY RECORDS

LOCATION.--Water samples collected above trash racks at All-American Canal headworks at west end of Imperial Dam.

PERIOD OF RECORD.--August 1969 to current year.
Prior to October 1971, published as sta 09429500, Colorado River at Imperial Dam, Ariz.-Calif.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to current year.
WATER TEMPERATURES: October 1974 to current year.

REMARKS.--Replaces water-quality station 09525500 Yuma Main Canal below Colorado River Siphon, at Yuma, Ariz.
Stream discharges reported with analyses represent total flow reaching Imperial Dam.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV 1984											
26...	1000	24800	1020	7.90	9.0	14.0	5.3	760	9.6	94	K12
JAN 1985											
14...	1025	24200	1000	7.80	13.0	10.0	5.5	760	13.3	118	<1
FEB											
12...	0930	25500	990	7.80	15.0	10.5	4.8	766	11.0	98	K3
MAY											
20...	1000	20200	1000	7.90	27.0	22.0	6.1	765	8.2	94	44
JUN											
10...	1030	22600	1000	7.80	35.0	25.0	5.0	756	7.5	92	K11
AUG											
26...	1100	23500	960	7.70	35.0	26.5	3.8	763	7.1	89	23

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
NOV 1984											
26...	48	310	200	79	27	94	2	3.8	137	0	112
JAN 1985											
14...	39	290	160	75	26	88	2	3.9	162	0	133
FEB											
12...	40	320	190	82	27	90	2	3.9	160	0	131
MAY											
20...	310	310	170	80	27	90	2	4.2	174	0	143
JUN											
10...	170	290	160	74	26	89	2	4.3	157	0	129
AUG											
26...	K20	300	180	76	27	90	2	4.2	146	0	120

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
NOV 1984											
26...	260	78	0.3	8.7	641	620	0.87	0.26	0.02	0.5	0.02
JAN 1985											
14...	260	75	0.3	8.4	642	620	0.87	0.29	0.04	0.5	0.01
FEB											
12...	250	73	0.3	9.0	640	620	0.87	0.27	0.03	0.3	0.02
MAY											
20...	250	73	0.3	8.7	637	620	0.87	0.22	0.07	0.9	0.03
JUN											
10...	250	77	0.3	8.4	629	610	0.86	0.19	0.06	0.3	0.02
AUG											
26...	240	71	0.3	9.4	618	590	0.84	0.18	0.04	0.4	0.02

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum observed, 1,970 microsiemens Aug. 23, 1977; minimum observed, 920 microsiemens Sept. 3, 1985.
WATER TEMPERATURES: Maximum observed, 33.0°C Aug. 20, 1977, Aug. 28, 29, 1981; minimum recorded, 7.5°C Dec. 31, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,160 microsiemens Mar. 29; minimum recorded, 920 microsiemens Sept. 3.
WATER TEMPERATURES: Maximum recorded, 28.0°C July 11, 12, 21-23, 28, 29, Aug. 29; minimum recorded, 9.5°C Feb. 2, 3.

INSTRUMENTATION.--Specific conductance and water temperature recorder October 1982 to current year.

WATER QUALITY DATA

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV 1984 26...	<0.01	<0.01	10	2	100	<0	<1	<1	<3	1	<3
JAN 1985 14...	<0.01	<0.01	--	--	--	--	--	--	--	--	--
FEB 12...	<0.01	<0.01	<10	2	100	2	<1	<1	<3	<1	4
MAY 20...	<0.01	<0.01	<10	1	100	<0.5	1	<1	<3	1	6
JUN 10...	0.01	<0.01	--	--	--	--	--	--	--	--	--
AUG 26...	0.02	<0.01	<10	2	110	<0.5	<1	<1	<3	<1	<3

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 1984 26...	2	45	<1	<0.1	<10	2	3	<1	1100	<6	<3
JAN 1985 14...	--	--	--	--	--	--	--	--	--	--	--
FEB 12...	<1	43	<1	<0.1	<10	3	3	<1	1100	<6	16
MAY 20...	1	47	3	--	<10	4	3	<1	1000	<6	11
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	<1	43	2	--	<10	1	3	<1	1000	<6	12

< Actual value is known to be less than value shown.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1070	1060	1060	1070	1020	1060	1010	997	1000	985	975	981
2	1070	1060	1060	1030	1020	1030	1010	999	999	985	965	979
3	1090	1060	1080	1030	1010	1020	1020	1000	1010	1010	985	996
4	1090	1080	1080	1030	1010	1020	1010	1000	1010	1020	996	1010
5	1090	1080	1080	1020	1010	1020	1010	1000	1000	1020	998	1010
6	1080	1070	1080	1030	1010	1020	1010	1000	1010	1010	1000	1010
7	1080	1070	1080	1030	1010	1020	1010	1000	1010	1000	991	997
8	1080	1070	1070	1020	1010	1020	1010	991	1000	993	983	993
9	1080	1050	1070	1020	1000	1010	1000	991	995	1000	994	996
10	1080	1070	1070	1020	1010	1010	1000	971	983	1020	1010	1010
11	1080	1070	1070	1010	972	1000	981	971	980	1020	1010	1010
12	1070	1060	1070	1000	994	996	1010	971	985	1020	1010	1020
13	1070	1050	1060	1000	995	995	1010	1000	1000	1020	1010	1010
14	1060	1040	1050	1010	986	997	1010	992	1000	1020	1000	1010
15	1060	1040	1050	1020	987	1000	1000	992	995	1020	1000	1010
16	1050	1040	1050	1020	1010	1010	1000	992	995	1030	1020	1030
17	1040	1030	1040	1020	1010	1010	1000	932	992	1040	1030	1030
18	1050	1030	1040	1020	1010	1020	1000	992	995	1030	998	1020
19	1040	1020	1030	1020	1010	1010	1000	992	997	1010	990	996
20	1030	1020	1030	1020	1010	1010	1000	993	996	1000	991	998
21	1070	1030	1050	1020	1000	1010	1000	983	996	1000	993	996
22	1060	1050	1060	1030	1010	1020	1000	983	994	1000	984	990
23	1050	1040	1050	1020	1010	1020	1000	993	998	1010	986	1000
24	1040	1020	1030	1020	1010	1010	1000	983	997	1010	997	1000
25	1030	1020	1030	1020	1010	1020	1000	993	995	1010	999	999
26	1040	1030	1030	1020	1000	1010	1000	994	995	1010	1000	1000
27	1040	1030	1030	1010	1000	1010	994	984	989	1010	1000	1000
28	1050	1030	1040	1010	1000	1000	994	984	986	1000	994	999
29	1070	1040	1050	1010	1000	1000	1000	974	987	1020	995	1010
30	1070	1060	1070	1010	996	1010	1000	984	994	1020	1010	1020
31	1080	1060	1070	---	---	---	994	984	986	1020	998	1010
MONTH	1090	1020	1056	1070	972	1013	1020	932	996	1040	965	1005
		FEBRUARY			MARCH			APRIL			MAY	
1	1030	1000	1020	1020	1000	1010	1100	1060	1080	1090	1070	1080
2	1030	1020	1020	1020	1010	1020	1110	1070	1090	1080	1060	1070
3	1020	990	1000	1020	1010	1010	1070	1040	1060	1080	1070	1070
4	1000	990	996	1020	1010	1010	1090	1060	1070	1080	1060	1070
5	1000	990	993	1030	1010	1020	1100	1050	1070	1080	1060	1070
6	1000	990	994	1030	1020	1030	1100	1090	1100	1080	1040	1060
7	1000	980	988	1070	1030	1050	1100	1070	1080	1070	1050	1060
8	1000	980	992	1080	1050	1060	1110	1100	1100	1070	1050	1060
9	1020	990	1000	1080	1070	1070	1110	1080	1090	1060	1050	1060
10	1020	990	1000	1070	1050	1060	1120	1100	1110	1080	1050	1070
11	1000	980	990	1070	1060	1060	1130	1110	1120	1080	1060	1070
12	1000	980	990	1070	1060	1060	1140	1110	1120	1070	1050	1060
13	990	980	985	1070	1070	1070	1130	1120	1120	1060	1040	1050
14	990	970	980	1080	1060	1070	1130	1110	1120	1070	1060	1070
15	980	960	973	1070	1050	1060	1130	1100	1110	1050	1020	1030
16	980	970	975	1070	1060	1070	1110	1100	1110	1060	1020	1040
17	990	960	974	1070	1070	1070	1120	1070	1090	1060	1030	1040
18	1010	980	998	1070	1060	1070	1110	1090	1100	1050	1030	1040
19	1010	1000	1010	1080	1060	1070	1100	1080	1090	1050	1000	1020
20	1010	1000	1010	1070	1050	1060	1080	1060	1070	1030	1000	1010
21	1020	1010	1010	1070	1060	1070	1080	1060	1070	1040	1020	1020
22	1020	1010	1010	1080	1050	1070	1080	1060	1070	1040	1030	1030
23	1020	1000	1010	1090	1070	1080	1070	1060	1060	1030	1020	1030
24	1010	1000	1010	1080	1060	1070	1080	1060	1070	1020	1010	1020
25	1010	990	1000	1090	1070	1080	1070	1060	1060	1020	1010	1010
26	1000	990	997	1100	1060	1070	1070	1050	1060	1030	1010	1020
27	1010	990	998	1120	1070	1090	1080	1060	1070	1030	1010	1020
28	1010	990	998	1150	1100	1130	1070	1050	1060	1030	1010	1020
29	---	---	---	1160	1100	1130	1080	1060	1070	1030	1010	1020
30	---	---	---	1090	1080	1080	1070	1050	1060	1030	1010	1010
31	---	---	---	1090	1070	1080	---	---	---	1020	998	1010
MONTH	1030	960	997	1160	1000	1063	1140	1040	1085	1090	998	1042

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1020	1010	1010	1010	980	1000	990	960	981	950	940	943
2	1020	999	1010	1010	1000	1010	1000	980	990	940	930	937
3	1010	1000	1000	1020	1000	1010	990	980	989	960	920	934
4	1000	940	988	1010	1000	1010	990	980	987	960	950	957
5	1010	981	996	1010	1000	1000	990	980	983	970	952	962
6	1010	991	1000	1010	950	996	990	980	983	974	964	964
7	1000	991	997	1020	1000	1010	990	980	985	986	966	973
8	1000	992	998	1020	1000	1000	990	980	983	978	968	975
9	1010	992	1000	1010	1000	1000	990	980	984	990	970	979
10	1010	1000	1010	1010	1000	1010	980	970	979	982	972	978
11	1010	993	1000	1010	1000	1000	990	970	978	984	974	978
12	1010	1000	1010	1010	990	998	990	970	979	1010	976	996
13	1020	1000	1000	1010	990	999	980	960	971	998	988	996
14	1010	994	1000	1000	990	997	980	970	974	1000	980	990
15	1010	994	999	1000	980	991	980	970	976	992	982	987
16	1010	995	1000	1000	980	988	980	960	970	984	974	978
17	1000	995	997	1000	980	989	970	960	963	996	976	983
18	1020	995	1000	990	970	980	970	950	962	988	968	981
19	1020	986	1010	990	970	980	970	950	959	970	960	966
20	1020	976	1010	990	970	981	960	950	953	962	952	957
21	986	976	979	990	970	979	990	950	973	984	954	961
22	987	967	978	980	970	974	980	970	977	996	966	978
23	987	967	979	980	960	971	990	970	978	998	978	989
24	987	967	972	970	960	967	990	970	975	1000	980	991
25	978	958	968	970	960	963	980	950	970	1000	982	991
26	978	958	969	970	950	960	980	970	973	994	984	987
27	978	958	969	970	960	964	970	950	961	996	976	984
28	979	969	976	970	960	968	960	950	955	988	968	975
29	979	969	975	980	960	968	970	940	956	980	970	975
30	990	970	975	980	970	973	960	940	951	982	972	974
31	---	---	---	970	960	968	960	930	943	---	---	---
MONTH	1020	940	992	1020	950	987	1000	930	972	1010	920	974

YEAR MAXIMUM 1160 MINIMUM 920 MEAN 1015

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.5	22.5	23.0	18.0	17.5	17.5	13.5	13.0	13.5	11.5	11.0	11.5
2	22.5	22.0	22.0	17.5	17.0	17.5	13.5	13.0	13.5	11.0	10.5	11.0
3	22.0	21.5	21.5	17.5	17.0	17.5	13.5	13.0	13.5	10.5	10.5	10.5
4	22.0	21.5	21.5	17.5	17.0	17.5	13.5	13.0	13.0	11.0	10.0	10.5
5	22.0	21.5	21.5	18.0	17.0	17.5	13.5	13.0	13.0	11.0	10.5	10.5
6	22.5	21.5	22.0	17.5	17.5	17.5	13.5	13.0	13.0	11.0	10.5	11.0
7	22.5	22.0	22.0	18.0	17.0	17.5	13.5	13.0	13.5	11.5	11.0	11.0
8	22.5	21.5	22.0	17.5	17.0	17.5	14.0	13.5	13.5	12.0	11.0	11.5
9	22.5	22.0	22.0	17.5	17.0	17.0	14.0	13.5	14.0	11.5	11.0	11.5
10	22.5	22.0	22.5	17.0	16.5	17.0	14.0	13.5	13.5	11.5	11.0	11.5
11	22.5	22.0	22.5	16.5	16.0	16.5	14.0	13.5	14.0	11.5	11.0	11.0
12	22.5	22.0	22.0	16.5	16.0	16.0	14.0	13.5	14.0	11.5	10.5	11.0
13	22.0	21.5	22.0	16.5	16.0	16.5	14.0	12.5	13.0	11.0	10.5	10.5
14	22.0	21.0	21.5	16.5	16.0	16.5	12.5	12.0	12.5	11.0	10.5	10.5
15	21.5	21.0	21.5	16.5	16.0	16.5	12.0	11.5	12.0	11.0	10.5	11.0
16	21.0	20.0	20.5	16.5	16.0	16.0	12.0	12.0	12.0	11.0	10.5	11.0
17	20.0	19.5	19.5	16.5	16.0	16.0	12.5	12.0	12.0	11.0	10.5	11.0
18	19.5	18.5	19.0	16.0	15.5	16.0	12.0	11.5	12.0	11.5	10.5	11.0
19	18.5	18.0	18.5	16.0	15.5	16.0	12.5	12.0	12.0	11.5	10.5	11.0
20	18.5	18.0	18.0	16.0	15.5	15.5	13.0	12.5	12.5	11.5	11.0	11.0
21	18.5	18.0	18.5	15.5	15.0	15.5	12.5	12.0	12.0	11.5	11.0	11.5
22	18.5	18.0	18.5	15.5	15.0	15.0	12.0	11.5	11.5	11.5	11.0	11.5
23	18.5	17.5	18.0	15.5	15.0	15.5	11.5	11.0	11.0	11.5	11.0	11.5
24	17.5	17.0	17.0	15.0	15.0	15.0	11.0	10.5	10.5	12.0	11.0	11.5
25	17.5	17.0	17.0	15.0	14.5	15.0	11.0	10.5	11.0	12.0	11.5	11.5
26	17.5	16.5	17.0	14.5	14.0	14.5	11.0	11.0	11.0	12.0	11.5	12.0
27	17.5	17.0	17.5	14.0	13.5	13.5	11.0	11.0	11.0	12.5	11.5	12.0
28	17.5	17.0	17.5	13.5	13.0	13.5	11.5	11.0	11.5	12.5	11.5	12.0
29	18.0	17.5	17.5	13.5	13.0	13.5	12.0	11.5	11.5	12.5	12.0	12.0
30	18.0	17.5	17.5	13.5	13.0	13.5	12.0	11.5	11.5	12.0	11.5	12.0
31	18.0	17.5	18.0	---	---	---	12.0	11.5	12.0	12.0	10.5	11.0
MONTH	23.5	16.5	20.0	18.0	13.0	16.0	14.0	10.5	12.5	12.5	10.0	11.0

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.5	10.0	10.0	14.5	14.0	14.0	16.0	14.5	15.0	22.0	21.0	21.5
2	10.0	9.5	9.5	14.5	13.5	14.0	16.5	15.5	16.0	22.5	21.5	22.0
3	10.0	9.5	10.0	13.5	13.0	13.5	17.5	16.5	17.0	22.5	22.0	22.0
4	10.5	10.0	10.0	13.5	12.5	13.0	18.0	17.0	17.5	22.5	22.0	22.0
5	10.5	10.0	10.0	13.5	12.5	13.0	18.0	17.0	17.5	22.0	21.5	22.0
6	10.5	10.0	10.0	14.0	13.0	13.5	18.0	17.5	18.0	21.5	21.0	21.5
7	10.5	10.0	10.5	14.0	13.5	13.5	18.5	17.5	18.0	21.5	21.0	21.5
8	10.5	10.0	10.5	14.0	13.5	14.0	19.0	18.0	18.5	22.5	21.5	22.0
9	11.0	10.5	10.5	14.5	13.5	14.0	19.5	18.5	19.0	22.5	22.0	22.5
10	11.5	10.5	11.0	15.0	14.0	14.5	20.0	19.0	19.5	22.5	21.0	21.5
11	11.0	10.5	11.0	15.0	14.5	15.0	20.5	19.5	20.0	21.5	20.5	21.0
12	11.0	10.5	11.0	15.0	14.5	14.5	20.5	19.5	20.0	21.5	20.5	21.0
13	11.5	11.0	11.5	15.0	14.0	14.5	20.5	19.5	20.0	22.5	21.0	21.5
14	12.5	11.5	12.0	15.0	14.0	14.5	20.5	20.0	20.0	23.0	22.0	22.5
15	12.5	12.0	12.0	15.5	14.5	15.0	21.0	20.5	20.5	23.0	22.0	22.5
16	13.0	12.0	12.5	15.5	14.5	15.0	21.5	20.5	21.0	23.0	22.0	22.5
17	13.0	12.0	12.5	16.0	15.0	15.5	21.5	20.5	20.5	23.0	22.0	22.5
18	13.5	12.5	13.0	16.0	15.0	15.5	20.0	19.0	19.0	23.0	22.0	22.5
19	13.5	13.0	13.0	15.5	14.5	15.0	19.0	18.0	18.5	23.0	22.5	23.0
20	13.5	13.0	13.5	15.5	15.0	15.5	19.0	18.0	18.5	23.0	22.0	22.5
21	13.5	13.0	13.0	16.5	15.0	16.0	19.0	18.0	18.5	23.0	22.5	22.5
22	13.0	12.5	13.0	16.5	15.5	16.0	19.5	18.5	19.0	23.5	22.5	23.0
23	13.5	12.5	13.0	16.0	15.5	16.0	20.5	19.0	19.5	23.5	23.0	23.5
24	13.5	13.0	13.5	16.0	15.0	15.5	21.0	20.0	20.5	24.0	23.0	23.5
25	14.0	13.0	13.5	16.5	15.5	16.0	21.0	20.5	21.0	24.0	23.0	23.5
26	14.0	13.0	13.5	16.0	15.5	16.0	20.5	19.0	19.5	24.0	23.0	23.5
27	14.5	13.5	14.0	16.0	15.0	15.5	19.0	18.5	18.5	23.5	23.0	23.5
28	14.5	13.5	14.0	15.5	14.5	15.0	19.5	18.0	18.5	23.5	22.5	23.0
29	---	---	---	14.5	14.0	14.5	20.5	19.5	20.0	23.5	22.5	23.0
30	---	---	---	14.5	14.0	14.0	21.5	20.5	21.0	23.5	22.5	23.0
31	---	---	---	15.0	13.5	14.5	---	---	---	23.0	22.0	22.5
MONTH	14.5	9.5	12.0	16.5	12.5	14.5	21.5	14.5	19.0	24.0	20.5	22.5
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.0	22.0	22.5	27.0	25.5	26.5	27.0	26.0	26.5	27.5	27.0	27.5
2	23.0	22.0	22.5	27.0	26.0	26.5	27.0	26.0	26.5	27.5	27.0	27.0
3	22.5	22.0	22.5	27.5	26.5	27.0	27.5	26.5	27.0	27.0	26.0	26.5
4	23.0	21.5	22.5	27.5	26.5	27.0	27.5	26.5	27.0	25.5	24.5	25.0
5	23.5	22.0	23.0	27.0	26.5	27.0	27.0	26.0	26.5	24.5	24.0	24.0
6	24.5	23.0	23.5	27.0	26.5	27.0	27.0	26.0	26.5	24.0	23.5	23.5
7	25.0	24.0	24.5	27.5	26.5	27.0	27.5	26.5	27.0	24.0	23.0	23.5
8	25.5	24.5	25.0	27.5	27.0	27.5	27.0	26.5	27.0	24.5	24.0	24.5
9	25.5	24.5	25.0	27.5	27.0	27.5	27.0	26.5	27.0	25.0	24.5	25.0
10	25.5	24.5	25.0	27.5	27.0	27.5	27.0	26.0	26.5	25.0	24.0	24.5
11	25.5	24.5	25.0	28.0	27.0	27.5	27.0	26.0	26.5	24.0	23.0	23.5
12	25.5	24.5	25.0	28.0	27.0	27.5	26.5	26.0	26.0	23.5	22.5	23.0
13	26.0	25.0	25.5	28.0	27.0	27.5	26.0	25.5	26.0	23.0	22.5	23.0
14	26.0	25.0	25.5	27.5	27.0	27.5	26.0	25.0	25.5	23.5	22.5	23.0
15	26.0	25.0	25.5	27.5	26.5	27.0	26.0	25.5	26.0	23.5	23.0	23.5
16	26.5	25.0	25.5	27.5	26.5	27.0	26.5	25.5	26.0	23.5	23.0	23.0
17	26.5	25.5	26.0	27.0	26.5	27.0	26.5	25.5	26.0	23.5	22.5	23.0
18	26.5	25.5	26.0	27.0	26.0	26.5	27.0	26.0	26.5	23.5	22.5	22.5
19	26.5	25.5	26.0	27.0	26.0	26.5	27.0	26.0	26.5	22.5	21.5	22.0
20	26.5	25.5	26.0	27.0	26.5	27.0	27.0	26.5	27.0	22.0	21.0	21.5
21	26.0	25.5	26.0	28.0	26.5	27.5	27.5	26.5	27.0	22.5	21.5	22.0
22	26.0	25.0	25.5	28.0	27.0	27.5	27.5	26.5	27.0	23.5	22.5	23.0
23	26.5	25.5	26.0	28.0	27.0	27.5	27.5	26.5	27.0	23.5	23.0	23.0
24	26.5	26.0	26.0	27.5	27.0	27.5	27.5	26.5	27.0	23.5	23.0	23.0
25	25.5	25.0	25.5	27.5	26.5	27.0	27.0	26.5	27.0	23.5	23.0	23.0
26	25.5	25.0	25.0	27.5	26.5	27.0	27.5	26.5	27.0	23.5	23.0	23.5
27	26.0	25.0	25.5	27.5	26.5	27.0	27.5	26.5	27.0	23.5	23.0	23.0
28	26.0	25.0	25.5	28.0	27.0	27.5	27.5	27.0	27.5	23.0	22.0	22.5
29	26.5	25.5	26.0	28.0	27.0	27.5	28.0	27.0	27.5	22.5	22.0	22.5
30	26.5	25.5	26.0	27.5	27.0	27.5	27.5	27.0	27.5	23.0	22.5	22.5
31	---	---	---	27.0	26.5	27.0	27.5	26.5	27.0	---	---	---
MONTH	26.5	21.5	25.0	28.0	25.5	27.0	28.0	25.0	26.5	27.5	21.0	23.5
YEAR	28.0	9.5	19.0									

09429500 COLORADO RIVER BELOW IMPERIAL DAM, AZ-CA

LOCATION.--Forebay gage: Lat 32°52'59", long 114°27'57", in NW¼SW¼ sec.9, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, near All-American Canal headworks at west end of Imperial Dam, 5 mi upstream from Laguna Dam, 15 mi northeast of Yuma, 90 mi downstream from Palo Verde Dam, and 147 mi downstream from Parker Dam.

DRAINAGE AREA.--188,500 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1971 published as "at Imperial Dam." Records of flow reaching Imperial Dam, formerly published with this station, are now published separately as sta 09429490, "Colorado River above Imperial Dam."

GAGE.--Water-stage recorder in forebay, 12 calibrated gates on California sluiceway, 8 calibrated gates on Gila sluiceway, and calibrated manometer on each discharge pipe from desilting basin. Datum of forebay gage is 162.00 ft, U.S. Bureau of Reclamation datum.

REMARKS.--No estimated daily discharges. Records good. Records of daily discharge show flow of Colorado River passing Imperial Dam, and include water released to river through California and Gila sluiceways, sludge from desilting basins returned to river, and leakage through dam. For records of flow reaching Imperial Dam see sta 09429490.

Flow of Colorado River regulated by many reservoirs, principally Lake Mead, since 1935. Many diversions from Colorado River and tributaries above station. Diversion to Mittry Lake and monthend contents of Senator Wash Reservoir also are now published with sta 09429490.

COOPERATION.--Records of gate openings furnished by U.S. Bureau of Reclamation. Records of sludge return flow from desilting basins furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 30,200 ft^3/s Aug. 18, 19, 1983; minimum daily, 27 ft^3/s Dec. 15-18, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 16,700 ft^3/s Feb. 6; minimum daily, 2,740 ft^3/s Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11800	11300	15300	15300	12800	11500	5050	4060	9340	9130	9300	10800
2	12000	11100	14900	15700	13600	11700	4960	3440	9850	9140	9470	10300
3	11800	11400	14600	15700	14500	11900	4880	3430	9520	9100	9220	10200
4	11700	14100	14800	15500	15900	11300	5150	3660	9180	9400	9640	10100
5	12000	13900	15000	15100	16400	11100	5670	3950	9190	9360	9090	10000
6	12100	13600	15200	14700	16700	10700	5180	3100	9190	9400	9120	9630
7	12200	13800	15600	14500	16600	10000	4500	2920	9430	9850	9190	9230
8	12100	13900	15300	14900	16100	9090	3730	3130	9060	9280	9010	9290
9	12000	14000	15600	14900	15500	8260	3620	2990	9410	9050	9060	9160
10	12000	13900	15700	14900	14000	7740	3770	2920	9010	9120	9050	9270
11	12000	13600	15700	14900	12500	6740	3020	3620	8800	9070	9710	8970
12	12000	13500	16100	14800	12800	6750	2860	4090	8980	9310	9110	9140
13	12300	13300	16300	14800	12800	6790	2980	3430	9340	9470	9230	9000
14	12500	13400	16100	14600	12200	6960	3220	3420	8950	9740	9070	8230
15	12200	13700	15900	14500	12200	7350	2740	4200	9060	9290	9260	8230
16	12000	14000	15700	14400	11500	7250	2980	5150	9220	9430	9240	7670
17	11800	14000	15700	14500	11700	7750	3340	5800	9010	9400	9320	7860
18	12000	14000	15800	14300	11300	7060	4490	5960	8990	9560	9920	8720
19	12100	13900	15900	14100	11100	7060	5060	6450	9110	9620	9370	8820
20	12200	13800	15700	14500	10900	6970	5600	6410	8950	9530	9460	9160
21	12000	14000	15500	13900	11400	6950	6250	7230	8790	10100	9430	9590
22	9670	14400	15100	13700	11500	7060	5000	7720	8750	9620	9430	9730
23	9010	14600	14900	13700	11700	7090	5580	7790	9280	9490	9720	8720
24	8920	14800	15200	14000	11900	7180	5440	7830	8850	9690	9620	8200
25	10300	15300	15200	14000	11200	6390	5470	8290	8570	9530	10100	7870
26	11000	15700	15000	14100	11200	6250	5440	8950	8860	9720	9820	7430
27	11100	15700	15100	14200	11200	5790	5590	8190	9020	9360	9820	7930
28	11100	15600	15700	13400	11100	5140	5240	8310	9090	9930	9900	8040
29	10800	15600	15800	13800	---	4090	4050	8530	9180	9420	10100	8480
30	10900	15700	15500	13600	---	4570	4140	8540	9580	9560	10200	8790
31	11000	---	15400	13100	---	5280	---	8790	---	9610	10200	---
TOTAL	356000	419600	479300	448100	362300	239760	135000	172300	273560	293280	294180	268560
MEAN	11500	13990	15460	14450	12940	7734	4500	5558	9119	9461	9490	8952
MAX	12500	15700	16300	15700	16700	11900	6250	8950	9850	10100	10200	10800
MIN	8920	11100	14600	13100	10900	4090	2740	2920	8570	9050	9010	7430
AC-FT	707300	832300	950700	888800	718600	475600	267800	341800	542600	581700	583500	532700

CAL YR 1984 TOTAL 5081740 MEAN 13880 MAX 18800 MIN 8920 AC-FT 10080000
WTR YR 1985 TOTAL 3742540 MEAN 10250 MAX 16700 MIN 2740 AC-FT 7423000

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA

LOCATION.--Lat 32°48'44", long 114°30'51", in SE¼NE¼ sec.35, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on right bank 1.4 mi downstream from Laguna Dam, 2.8 mi northeast of Bard, Calif., and 10 mi northeast of Yuma, Ariz.

DRAINAGE AREA.--188,600 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--December 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 120.84 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark).

REMARKS.--No estimated daily discharges. Records fair. Natural flow of Colorado River at this point is affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas. Flow past station consists mainly of water released through Imperial Dam, sludge from the desilting basins at Imperial Dam, seepage through Imperial Dam, and seepage from the All-American Canal and the Gila Gravity Main Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 30,900 ft^3/s Aug. 19, 1983; minimum daily, 71 ft^3/s May 29, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 16,600 ft^3/s Dec. 12, 13; minimum daily, 2,900 ft^3/s Apr. 12-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11600	11200	15700	15500	13000	11600	5040	4170	9510	9400	9160	10800
2	11600	11100	15200	15700	13700	11600	4990	3880	9960	9380	9390	10600
3	11500	11300	15000	15700	14400	11900	4800	3650	9660	9250	9340	10400
4	11500	13000	15000	15500	15300	11400	5110	3770	9330	9510	9830	10300
5	11900	13600	15100	15300	15800	11300	5540	4140	9290	9510	9380	10200
6	11900	13400	15400	14800	16200	11300	5120	3270	9270	9440	9280	9850
7	12100	13300	15900	14600	15800	10500	4390	3060	9510	9760	9370	9500
8	11900	13400	15500	14500	15600	9800	3850	3310	9350	9510	9200	9580
9	11900	13400	15900	15000	14800	9110	3690	3140	9470	9170	9220	9490
10	12000	13700	16200	15200	13700	8480	3740	3040	9330	9300	9190	9490
11	11900	13700	16500	15100	12200	6510	3150	3770	9030	9110	9750	9330
12	11800	13600	16600	14800	12300	6600	2900	4230	9150	9280	9500	9390
13	12100	13400	16600	14800	12400	6750	2900	3630	9530	9340	9620	9240
14	12200	13700	16400	14600	11900	7000	2900	3410	9170	9690	9520	8620
15	12000	13800	16000	14400	11900	7480	2900	4190	9310	9260	9680	8550
16	11800	14000	16000	14400	11800	7470	3030	5350	9490	9400	9660	8240
17	11600	14100	16100	14500	12000	7980	3380	6200	9270	9270	9510	8320
18	11800	14200	15900	14500	11800	7560	4590	6320	9270	9260	10100	8860
19	11800	14000	15900	14300	11800	7580	5070	6870	9430	9550	9790	9070
20	11900	14000	15700	14400	11800	7430	5480	6850	9350	9380	9790	9050
21	11900	14100	15600	14200	12100	7340	6150	7510	9100	9890	9810	9420
22	10100	14600	15500	13700	11800	7430	5010	8100	9060	9430	9870	9630
23	9240	14400	15300	13900	12000	7410	5460	8030	9570	9300	10200	8980
24	9100	14700	15300	14000	12400	7420	5390	8030	9210	9420	10000	8480
25	9970	15100	15500	14000	11800	6780	5500	8490	8920	9270	10500	8220
26	10700	15700	15400	14000	11200	6730	5490	9010	9180	9410	10300	7860
27	10900	15800	15300	14100	11200	6380	5740	8500	9360	9220	10300	8040
28	10800	15800	15300	13600	11100	5890	5440	8520	9370	9670	10300	8350
29	10800	15800	15400	13800	---	4390	4210	8820	9490	9240	10300	8550
30	10700	15800	15400	13600	---	4560	4290	8740	9920	9270	10200	8700
31	10900	---	15500	13100	---	5500	---	8800	---	9400	10400	---
TOTAL	351910	417700	486100	449600	361800	249180	135250	178800	280860	291290	302460	275110
MEAN	11350	13920	15680	14500	12920	8038	4508	5768	9362	9396	9757	9170
MAX	12200	15800	16600	15700	16200	11900	6150	9010	9960	9890	10500	10800
MIN	9100	11100	15000	13100	11100	4390	2900	3040	8920	9110	9160	7860
AC-FT	698000	828500	964200	891800	717600	494300	268300	354600	557100	577800	599900	545700

CAL YR 1984 TOTAL 5168200 MEAN 14120 MAX 19200 MIN 9000 AC-FT 10250000
WTR YR 1985 TOTAL 3780060 MEAN 10360 MAX 16600 MIN 2900 AC-FT 7498000

09430500 GILA RIVER NEAR GILA, NM

LOCATION.--Lat 33°03'40", long 108°32'12", in NE¼NW¼ sec.30, T.14 S., R.16 W., Grant County, Hydrologic Unit 15040001, on left bank at Hooker damsite, 1.6 mi upstream from Mogollon Creek, 7 mi northeast of Gila, and at mile 572.5.

DRAINAGE AREA.--1,864 mi^2.

PERIOD OF RECORD.--April to December 1914, December 1927 to current year. Monthly discharge only December 1927 to September 1930, published in WSP 1313.

REVISED RECORDS.--WSP 1283: Drainage area. WSP 1313: 1944(M), 1949(M). WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 4,655.8 ft above National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Dec. 31, 1928, at site 5 mi upstream at different datum. Dec. 31, 1928, to Jan. 7, 1942, at site 200 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 500 acres above station.

AVERAGE DISCHARGE.--58 years (water years 1928-85), 147 ft^3/s, 106,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft^3/s Dec. 18, 1978, gage height, 12.5 ft, from floodmark, from rating curve extended above 7,000 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 17.2 ft from floodmark, Sept. 29, 1941; minimum, 14 ft^3/s July 15, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Other major floods occurred in November 1905, December 1906, and January 1916.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 20	2000	2,830	4.02	Feb. 21	1745	1,060	2.37
Dec. 28	0830	*35,200	a*13.0	Mar. 3	2215	876	2.13
Jan. 27	0445	3,550	4.38	Mar. 13	0315	5,070	5.35

a From floodmarks

Minimum discharge, 45 ft^3/s Sept. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	105	77	1350	667	708	463	442	162	57	92	65
2	73	103	76	932	520	808	423	485	149	56	98	61
3	90	101	87	674	460	842	383	521	139	55	134	61
4	117	98	94	535	442	830	374	517	131	54	135	58
5	119	96	115	480	408	717	382	519	129	52	192	55
6	131	92	115	425	362	631	407	516	127	51	130	55
7	122	88	107	400	336	574	439	466	119	51	108	53
8	112	85	105	385	331	538	463	415	112	50	120	52
9	103	85	105	375	365	567	506	373	108	49	109	50
10	95	85	103	340	435	796	492	357	108	47	97	50
11	92	85	111	312	464	1310	475	355	105	46	122	50
12	93	85	212	296	455	1920	463	341	99	48	125	53
13	93	85	332	296	471	4120	459	307	98	54	116	52
14	89	85	405	280	536	2210	455	273	96	52	109	50
15	85	85	344	272	596	1680	446	255	93	53	98	48
16	85	85	296	260	626	1500	457	236	89	58	90	50
17	84	83	256	252	673	1330	459	224	83	62	83	49
18	92	82	252	232	772	1270	452	222	80	60	79	53
19	97	81	340	225	865	1210	465	220	78	67	83	70
20	98	81	1700	226	928	1150	417	216	81	67	85	91
21	99	83	1940	229	1010	1040	365	213	81	69	88	81
22	99	82	1020	227	1020	953	342	207	77	69	81	101
23	98	80	656	234	894	852	314	195	75	76	77	86
24	99	78	495	279	779	761	282	191	72	65	75	76
25	103	78	395	485	661	688	254	183	71	64	77	69
26	103	78	332	1290	588	648	250	175	66	62	97	64
27	106	81	974	2810	554	619	300	178	64	60	89	61
28	105	82	23400	1600	579	595	362	177	62	103	77	63
29	105	81	8740	1120	---	577	393	172	60	88	72	71
30	103	79	4220	934	---	559	384	164	58	77	70	72
31	103	---	2190	818	---	508	---	161	---	71	68	---
TOTAL	3070	2577	49594	18573	16797	32511	12126	9276	2872	1893	3076	1870
MEAN	99.0	85.9	1600	599	600	1049	404	299	95.7	61.1	99.2	62.3
MAX	131	105	23400	2810	1020	4120	506	521	162	103	192	101
MIN	73	78	76	225	331	508	250	161	58	46	68	48
AC-FT	6090	5110	98370	36840	33320	64490	24050	18400	5700	3750	6100	3710

CAL YR 1984 TOTAL 85769 MEAN 234 MAX 23400 MIN 40 AC-FT 170100
WTR YR 1985 TOTAL 154235 MEAN 423 MAX 23400 MIN 46 AC-FT 305900

09431500 GILA RIVER NEAR REDROCK, NM

LOCATION.--Lat 32°43'37", long 108°40'30", in W½ sec.23, T.18 S., R.18 W., Grant County, Hydrologic Unit 15040002, on left bank 0.2 mi downstream from Copper Canyon, 0.2 mi upstream from lower end of box canyon, 4.7 mi northeast of Redrock, 14 mi downstream from Mangas Creek, and at mile 539.2.

DRAINAGE AREA.--2,829 mi^2.

PERIOD OF RECORD.--September 1904 to February 1905 (gage heights only). May 1905 to December 1906, January to December 1907 and July to October 1908 (gage heights only). November 1908 to December 1910, January 1911 to January 1912 and May to June 1912 (gage heights only). August 1912 to September 1955, October 1962 to current year. Monthly or annual discharge only for some periods, published in WSP 1313. Published as "near Cliff" 1904-7.

REVISED RECORDS.--WSP 1213: 1906, 1911-15, 1931, 1936-37, 1939, 1941, 1944, 1945(P), 1946(M), 1947. WSP 1283: Drainage area. WSP 1926: 1955. WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Elevation of gage is 4,090 ft above National Geodetic Vertical Datum of 1929, from plane table survey. Prior to Dec. 31, 1907, nonrecording gage at site 13.5 mi upstream at different datum. May 14, 1908, to July 16, 1909, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 28 to Jan. 22. Records fair. Diversions for irrigation of about 5,000 acres a

AVERAGE DISCHARGE.--69 years (water years 1906, 1909-10, 1913-55, 1963-85), 208 ft^3/s, 150,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,800 ft^3/s Dec. 19, 1978, gage height, 29.8 ft in gage well, 34.1 ft from floodmarks, from rating curve extended above 9,500 ft^3/s on basis of slope-area measurement of peak flow; minimum, 2.2 ft^3/s Aug. 5, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 20	2030	4,700	9.56	Jan. 27	1200	5,990	10.07
Dec. 28	unknown	*39,100	a*25.2	Mar. 13	0915	6,250	11.59

a From floodmarks

Minimum discharge, 27 ft^3/s, July 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	120	78	1500	949	825	720	565	141	40	110	50
2	80	93	71	1100	707	970	616	620	122	33	121	47
3	105	90	76	800	555	1020	555	701	119	33	239	44
4	265	67	100	660	515	1050	528	688	114	34	172	41
5	238	65	122	600	463	953	519	700	108	32	177	46
6	211	77	145	560	396	858	545	714	114	33	207	47
7	188	108	141	520	341	792	595	675	116	32	176	42
8	153	101	130	460	326	748	648	678	107	33	157	39
9	130	85	111	450	367	766	684	605	91	29	149	33
10	132	73	120	420	514	923	747	523	92	31	138	34
11	135	54	140	400	690	1410	687	527	87	34	179	37
12	117	64	358	380	576	2030	629	518	83	33	189	32
13	102	80	590	360	605	4680	622	479	74	32	151	32
14	88	59	928	340	696	2410	607	414	70	33	127	32
15	82	63	819	330	730	1620	609	403	68	40	118	31
16	96	76	721	320	800	1530	612	369	69	33	109	37
17	102	68	664	310	830	1360	648	334	75	31	96	36
18	94	65	659	310	886	1300	674	299	77	31	82	45
19	112	72	862	310	1040	1220	690	287	70	33	103	71
20	96	92	2610	310	1150	1170	623	274	73	35	136	149
21	79	100	3440	310	1250	1070	520	270	67	83	97	145
22	95	79	1830	310	1350	1000	487	230	66	131	93	118
23	120	60	1410	306	1200	937	465	209	54	79	108	122
24	121	87	1140	329	1040	872	437	203	63	76	81	106
25	122	85	1010	438	865	823	364	178	55	67	74	90
26	116	104	907	1000	759	825	330	151	56	65	78	79
27	108	125	919	5170	688	845	383	150	56	62	91	70
28	125	129	23000	2660	690	862	488	149	61	129	77	79
29	132	114	10000	1680	---	868	597	152	44	118	75	103
30	125	92	7000	1330	---	888	547	139	60	104	67	96
31	119	---	3000	1180	---	843	---	145	---	114	55	---
TOTAL	3858	2547	63101	25153	20978	37468	17176	12349	2452	1693	3832	1933
MEAN	124	84.9	2036	811	749	1209	573	398	81.7	54.6	124	64.4
MAX	265	129	23000	5170	1350	4680	747	714	141	131	239	149
MIN	70	54	71	306	326	748	330	139	44	29	55	31
AC-FT	7650	5050	125200	49890	41610	74320	34070	24490	4860	3360	7600	3830

CAL YR 1984 TOTAL 109390 MEAN 299 MAX 23000 MIN 19 AC-FT 217000
WTR YR 1985 TOTAL 192540 MEAN 528 MAX 23000 MIN 29 AC-FT 381900

09432000 GILA RIVER BELOW BLUE CREEK, NEAR VIRDEN, NM

LOCATION.--Lat 32°38'53", long 108°50'43", in SE¼SW¼ sec.18, T.19 S., R.19 W., Grant County, Hydrologic Unit 15040002, on left bank at head of canyon, 1.4 mi downstream from Blue Creek, 10 mi east of Virden, and 16 mi upstream from New Mexico-Arizona State line.

DRAINAGE AREA.--3,203 mi^2, excluding Animas River basin.

PERIOD OF RECORD.--May to November 1914, March to September 1915, July 1927 to current year. July 1927 to May 1931 monthly discharge only, published in WSP 1313, computed as sum of flow at Virden Bridge, 9 mi downstream, and in Sunset Canal. Published as "Gila River near Duncan, Ariz.," 1914-15 and as "Gila River at Fuller's Ranch, near Duncan, Ariz.," 1931-38.

REVISED RECORDS.--WSP 1283: Drainage area. WSP 1313: 1929, 1931-32(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,875 ft above National Geodetic Vertical Datum of 1929, from river-profile map. May 11, 1914, to Sept. 30, 1915, at site 6 mi downstream, 1,000 ft upstream from intake of Sunset Canal. June 1 to July 7, 1931, nonrecording gage at present site and datum. Since April 18, 1980, supplementary gage on left bank 800 ft downstream at same datum. Since June 1980, crest-stage gages at supplementary gage site.

REMARKS.--Estimated daily discharge: June 22 to July 1. Records good. Station is above all Duncan Valley diversions. Diversions for irrigation of about 6,200 acres above station.

AVERAGE DISCHARGE.--58 years (water years 1928-85), 195 ft^3/s, 141,300 acre-ft/yr; median of yearly mean discharges, 140 ft^3/s, 101,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58,700 ft^3/s Dec. 19, 1978, gage height, 29.00 ft, from rating curve extended above 38,000 ft^3/s on basis of slope-area measurement of peak flow; minimum, 1 ft^3/s July 14, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	0830	3,350	9.95	Jan. 27	1330	4,180	10.59
Dec. 28	1615	*37,000	*23.20	Mar. 13	1500	5,520	11.50

Minimum daily discharge, 18 ft^3/s July 14, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	122	117	2210	1420	780	703	571	179	47	149	52
2	91	114	109	1710	1140	888	648	641	167	34	143	50
3	117	109	107	1490	989	917	630	667	158	26	300	45
4	185	98	114	1260	917	953	607	689	146	25	195	36
5	182	93	124	1120	847	882	601	693	144	25	167	39
6	173	93	138	946	748	786	619	689	141	32	205	44
7	164	109	146	813	648	703	654	676	144	35	185	39
8	155	114	146	728	613	642	685	641	138	26	173	32
9	138	107	132	697	624	613	709	575	122	22	155	31
10	130	104	135	648	728	678	709	528	112	20	167	28
11	135	93	146	601	820	1100	691	513	104	22	170	28
12	127	88	207	556	741	1700	666	491	100	22	198	30
13	119	102	429	523	697	4270	660	456	93	19	167	24
14	112	98	601	502	735	4150	648	405	86	18	141	24
15	102	93	551	481	806	3010	648	370	84	22	119	25
16	107	98	471	471	827	2500	648	344	82	24	107	25
17	109	107	446	436	861	2060	654	318	82	18	95	31
18	107	98	436	407	924	1900	654	306	86	78	84	73
19	109	98	523	388	1040	1710	648	278	82	48	100	50
20	117	109	1650	370	1110	1610	624	274	88	48	135	126
21	104	117	2920	384	1200	1430	556	274	86	52	107	155
22	104	114	1800	379	1310	1220	523	270	84	100	98	124
23	117	102	1310	388	1220	1140	492	258	80	130	102	119
24	124	112	1030	407	1070	1080	471	244	76	91	95	109
25	124	114	896	461	917	1030	431	236	72	82	78	86
26	127	119	786	626	827	938	402	215	64	72	76	74
27	122	130	914	3420	760	896	426	202	60	97	88	64
28	122	144	20100	3190	709	854	471	198	57	130	82	104
29	130	135	10400	2680	---	827	513	192	53	138	88	117
30	124	124	5270	1990	---	806	536	182	50	130	78	104
31	124	---	3650	1660	---	760	---	182	---	122	64	---
TOTAL	3883	3258	55804	31942	25248	42833	17927	12578	3020	1755	4111	1888
MEAN	125	109	1800	1030	902	1382	598	406	101	56.6	133	62.9
MAX	185	144	20100	3420	1420	4270	709	693	179	138	300	155
MIN	82	88	107	370	613	613	402	182	50	18	64	24
AC-FT	7700	6460	110700	63360	50080	84960	35560	24950	5990	3480	8150	3740

CAL YR 1984 TOTAL 103761 MEAN 283 MAX 20100 MIN 26 AC-FT 205800
WTR YR 1985 TOTAL 204247 MEAN 560 MAX 20100 MIN 18 AC-FT 405100

09442000 GILA RIVER NEAR CLIFTON, AZ

LOCATION.--Lat 32°57'57", long 109°18'35", in NE¼SE¼ sec.25, T.5 S., R.29 E., Greenlee County, Hydrologic Unit 15040002, on right bank 60 ft upstream from bridge on county road, 6 mi upstream from San Francisco River, and 6 mi south of Clifton.

DRAINAGE AREA.--4,010 mi^2.

PERIOD OF RECORD.--November 1910 to July 1918 (published as "at Guthrie"), October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1059: 1911-12, 1915, 1917. WSP 1179: 1929(M), 1934(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,336.38 ft above National Geodetic Vertical Datum of 1929. Nov. 6, 1910, to July 11, 1918, non-recording gage or water-stage recorder at two sites about 6 mi upstream at Guthrie at different datums. March 1928 to June 1948 water-stage recorder at present site at datum 0.91 ft lower. June 1948 to Oct. 17, 1967, water-stage recorder at site 0.2 mi upstream at datum 3.12 ft higher. Oct. 18, 1967, to June 23, 1974, Apr. 10, 1978, to Feb. 6, 1979, at site 500 ft downstream at datum 0.44 ft higher. June 24, 1974 to Apr. 9, 1978, at present site and datum.

REMARKS.--No estimated daily discharges. Records fair. Diversions for irrigation of about 14,300 acres above station. Station is below all Duncan Valley diversions.

AVERAGE DISCHARGE.--64 years (water years 1912-17, 1928-85), 197 ft^3/s, 142,700 acre-ft/yr; median of yearly mean discharges, 140 ft^3/s, 101,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,000 ft^3/s Dec. 19, 1978, gage height, 23.80 ft, from rating curve extended above 28,000 ft^3/s; minimum daily, 5 ft^3/s Aug. 24, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*), from rating curve extended above 28,000 ft^3/s.

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 29	0700	*48,800	*20.8	Mar. 14	0230	4,010	7.97
Jan. 28	0300	3,480	8.05	Sept. 19	1800	2,990	7.63

Minimum daily discharge, 31 ft^3/s July 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	123	121	2340	1170	606	767	459	164	36	92	68
2	80	121	116	1760	979	691	706	528	164	35	109	62
3	377	121	118	1440	831	752	653	575	145	34	215	72
4	264	114	133	1260	736	757	625	593	137	34	173	73
5	213	107	116	1080	706	752	593	588	131	33	145	60
6	193	96	125	962	662	691	593	575	125	32	123	54
7	191	91	139	875	616	602	615	575	143	32	143	51
8	177	94	149	804	499	549	658	540	143	32	129	51
9	170	92	151	752	566	523	696	499	123	31	139	50
10	157	83	143	721	611	523	731	440	116	32	121	49
11	145	85	151	701	752	634	736	406	101	33	123	48
12	145	82	162	682	831	1120	696	399	75	34	133	47
13	143	75	226	653	752	2150	653	399	67	34	143	42
14	127	73	478	616	711	3400	629	378	58	34	127	42
15	116	76	606	588	731	2390	616	357	48	36	111	81
16	97	69	562	575	783	2000	597	337	47	36	97	167
17	94	78	507	562	782	1820	616	312	47	35	85	68
18	89	82	490	532	825	1650	602	300	48	34	75	125
19	89	82	499	519	903	1560	597	287	47	76	82	781
20	89	80	744	499	991	1490	575	264	48	317	170	281
21	97	86	1790	495	1080	1430	528	259	47	88	137	140
22	96	97	1580	490	1200	1330	479	247	48	63	109	129
23	94	101	1100	487	1200	1250	455	236	49	70	86	116
24	107	101	831	495	1080	1160	428	229	49	50	76	109
25	120	104	682	495	932	1030	406	221	48	59	91	97
26	129	112	593	616	825	962	378	206	44	56	82	86
27	133	112	528	1720	711	915	361	193	40	170	73	73
28	131	121	2640	3050	643	881	399	172	39	362	67	108
29	120	135	25600	1960	---	858	410	168	39	109	63	206
30	131	131	6900	1520	---	836	455	164	37	88	69	141
31	127	---	3530	1330	---	820	---	159	---	186	72	---
TOTAL	4332	2924	51510	30579	23108	36132	17253	11065	2417	2301	3460	3477
MEAN	140	97.5	1662	986	825	1166	575	357	80.6	74.2	112	116
MAX	377	135	25600	3050	1200	3400	767	593	164	362	215	781
MIN	80	69	116	487	499	523	361	159	37	31	63	42
AC-FT	8590	5800	102200	60650	45830	71670	34220	21950	4790	4560	6860	6900

CAL YR 1984 TOTAL 100404 MEAN 274 MAX 25600 MIN 27 AC-FT 199200
WTR YR 1985 TOTAL 188558 MEAN 517 MAX 25600 MIN 31 AC-FT 374000

09442680 SAN FRANCISCO RIVER NEAR RESERVE, NM

LOCATION.--Lat 33°44'12", long 108°46'14", in NE¼NW¼SE¼ sec.35, T.6 S., R.19 W., Catron County, Hydrologic Unit 15040004, on left bank 1,300 ft downstream from Rainbow Bridge Canyon, 1.7 mi northwest of Reserve, and at mile 563.1.

DRAINAGE AREA.--350 mi^2, approximately.

PERIOD OF RECORD.--March 1959 to current year.

REVISED RECORDS.--WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Elevation of gage is 5,820 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 15, 1972, at site 1,800 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 29, Dec. 31 to Jan. 14, Jan. 15-26, Feb. 1-4, Mar. 14, 15, Mar. 25 to Apr. 1, May 12 to June 27, and Aug. 17-21. Records good except for estimated daily discharges, which are poor. Possible minor regulation by Luna Lake, 27 mi upstream. Diversions for irrigation of about 280 acres above station.

AVERAGE DISCHARGE.--26 years, 28.3 ft^3/s, 20,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,830 ft^3/s Oct. 1, 1983, gage height, 11.71 ft recorded, 11.3 ft, from outside floodmarks, from rating curve extended above 1,400 ft^3/s on basis of slope-area measurement of peak flow; minimum, 1.0 ft^3/s Mar. 16, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 15 ft, as determined in 1962 from old floodmarks. Major floods of Nov. 26, 1905 and Dec. 3, 1906, exceeded 20,000 ft^3/s at Alma (downstream). See WSP 1313.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1000	569	3.33	July 31	1800	1,700	3.98
Dec. 27	2330	*3,170	*5.42	Aug. 3	1645	1,430	3.73
Mar. 12	1845	1,500	3.93	Aug. 10	1730	458	2.38
July 29	1630	2,440	4.60	Aug. 21	1945	1,760	4.06

Minimum discharge, 1.9 ft^3/s, July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	15	12	210	60	319	115	101	13	8.9	8.1	11
2	12	15	12	170	57	313	102	90	13	8.3	8.9	11
3	85	15	13	140	55	316	92	79	12	7.9	136	11
4	67	15	18	110	52	198	89	68	12	7.5	45	11
5	34	15	16	90	53	139	88	58	11	6.9	27	11
6	23	15	15	75	51	125	88	51	11	5.9	17	11
7	19	15	14	60	51	132	90	43	10	6.8	14	11
8	16	14	15	58	44	131	92	38	10	7.2	15	11
9	14	14	15	57	43	153	92	34	10	7.3	11	11
10	12	13	15	56	41	362	89	33	10	7.9	55	11
11	12	13	29	55	39	633	88	31	9.8	9.2	39	10
12	12	13	30	54	39	1120	80	28	9.4	9.0	32	10
13	11	12	55	53	39	819	72	25	9.4	7.7	25	10
14	9.9	13	52	52	41	600	66	24	9.4	4.9	20	10
15	10	13	46	51	44	420	64	23	9.2	11	18	10
16	9.4	13	20	49	55	402	61	22	9.0	13	16	9.9
17	8.2	14	18	48	78	403	59	23	8.6	11	14	9.4
18	7.1	14	26	47	108	417	60	23	8.4	7.6	13	22
19	6.6	13	35	46	127	448	65	22	8.2	7.9	12	96
20	6.9	12	65	45	155	420	55	21	8.0	9.2	11	77
21	9.4	12	51	44	202	373	48	19	8.0	7.7	78	30
22	11	12	44	43	189	334	51	18	7.8	14	12	27
23	12	13	37	46	155	283	51	17	7.4	11	9.7	25
24	13	15	31	49	107	259	43	16	7.0	6.5	8.4	22
25	15	14	29	52	92	257	37	17	6.8	4.9	38	19
26	16	14	26	179	100	220	36	16	6.6	4.0	34	20
27	17	12	434	161	121	200	49	15	6.4	1.9	14	20
28	16	13	1950	103	234	180	92	15	6.2	3.2	14	89
29	15	14	801	75	---	160	116	14	8.4	83	13	56
30	15	12	338	69	---	145	114	14	8.3	3.9	11	35
31	15	---	250	63	---	130	---	14	---	64	11	---
TOTAL	539.0	407	4512	2410	2432	10411	2244	1012	274.3	369.2	780.1	717.3
MEAN	17.4	13.6	146	77.7	86.9	336	74.8	32.6	9.14	11.9	25.2	23.9
MAX	85	15	1950	210	234	1120	116	101	13	83	136	96
MIN	6.6	12	12	43	39	125	36	14	6.2	1.9	8.1	9.4
AC-FT	1070	807	8950	4780	4820	20650	4450	2010	544	732	1550	1420

CAL YR	1984	TOTAL	9842.6	MEAN	26.9	MAX	1950	MIN	5.0	AC-FT	19520
WTR YR	1985	TOTAL	26107.9	MEAN	71.5	MAX	1950	MIN	1.9	AC-FT	51780

09443000 SAN FRANCISCO RIVER NEAR ALMA, NM

LOCATION.--Lat 33°22'05", long 108°54'35", in SW¼SE¼ sec.4, T.11 S., R.20 W., Catron County, Hydrologic Unit 15040004, on right bank 1.2 mi downstream from Alma, 4 mi northwest of Glenwood, 6 mi upstream from Whitewater Creek, and at mile 523.5.

DRAINAGE AREA.--1,546 mi^2.

PERIOD OF RECORD.--September 1904 to January 1914, fragmentary (see WSP 1313), January 1964 to current year. Prior to October 1911, published as "at Alma."

REVISED RECORDS.--WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Elevation of gage is 4,842 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 11, 1912, nonrecording gages at various sites, within 500 ft of each other, 0.8 mi upstream, at different datums. Aug. 11, 1912, to Feb. 2, 1914, nonrecording gage at approximately present site and datum. Jan. 10, 1964, to Nov. 1, 1972, at datum 3.00 ft higher.

REMARKS.--Estimated daily discharges: Oct. 9, 10, Mar. 1-11, Mar. 14 to Apr. 2. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,600 acres above station.

AVERAGE DISCHARGE.--21 years (water years 1965-85), 88.4 ft^3/s, 64,050 acre- ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,600 ft^3/s Oct. 2, 1983, gage height, 21.44 ft, present datum, from floodmark inside gage well, from rating curve extended above 9,000 ft^3/s on basis of slope-area measurements at gage heights 18.16 ft and 21.44 ft; no flow at times each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred Jan. 19 and Oct. 14, 1916, when discharges of 60,000 ft^3/s were computed at Clifton, AZ.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 20	1130	1,340	4.06	Jan. 26	2330	1,100	4.35
Dec. 28	0445	*26,500	*13.64	Mar. 13	0230	4,990	6.79

No flow Sept. 24-28.

REVISIONS.--The daily discharge for Sept. 30, 1983 has been revised to 7,100 ft^3/s. The revised discharges for September 1983, the 1983 water and calendar years are given below. These figures supersede those published in the reports for 1983 and 1984.

Sept. 30 7100

	TOTAL	MEAN	MAX	MIN	AC-FT
September 1983	9040	301	7100	15	17930
Wtr Yr 1983	63179	173	7100	0	125300
Cal Yr 1983	120192.2	329	22000	2.0	238400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	35	25	1210	208	960	290	210	45	3.6	119	3.4
2	16	33	24	593	170	960	270	222	39	3.4	89	3.2
3	155	31	24	548	171	900	240	217	34	3.3	98	3.1
4	173	30	35	421	169	800	237	213	32	3.2	206	2.9
5	119	28	38	343	157	630	237	203	36	3.1	114	3.1
6	70	27	33	267	145	550	239	189	39	3.1	82	3.0
7	44	26	31	221	144	500	242	176	31	2.7	54	2.9
8	29	25	29	227	153	460	249	164	19	2.6	40	2.6
9	18	24	29	228	174	475	248	149	16	2.6	34	2.6
10	14	22	29	207	228	720	243	121	15	2.5	116	2.9
11	12	21	90	195	196	1900	233	114	16	2.5	148	2.9
12	15	20	218	197	200	2600	220	111	14	2.6	76	2.6
13	17	19	279	190	219	3640	209	100	11	6.9	65	2.6
14	15	20	283	181	271	1500	206	88	7.3	8.4	40	2.6
15	13	20	201	177	288	1030	202	79	6.6	5.7	26	2.8
16	14	20	150	172	323	1000	199	70	5.5	4.1	19	2.6
17	16	23	136	165	352	930	196	73	5.3	3.7	14	2.6
18	17	24	149	156	418	850	191	75	5.5	6.1	12	20
19	17	24	226	150	476	800	188	74	5.8	3.8	10	237
20	17	23	896	145	518	760	178	67	5.7	3.3	9.3	164
21	19	23	705	139	589	680	164	54	5.4	5.9	9.3	39
22	24	22	354	136	591	620	167	52	5.2	9.0	38	7.6
23	27	23	235	145	555	550	153	55	4.8	8.8	29	1.9
24	28	31	178	167	478	480	144	60	4.8	11	16	.64
25	32	32	166	182	439	450	130	57	4.4	12	12	.00
26	37	30	161	457	440	420	135	55	4.3	12	25	.00
27	38	26	2090	678	478	400	153	53	4.2	12	39	.00
28	41	24	13100	378	662	380	192	51	4.8	13	20	60
29	40	26	3650	320	---	360	215	47	4.6	24	7.9	161
30	39	27	2260	306	---	350	216	42	3.8	72	4.3	41
31	37	---	1610	272	---	330	---	42	---	62	3.9	---
TOTAL	1170	759	27434	9173	9212	26985	6186	3283	435.0	318.9	1575.7	780.54
MEAN	37.7	25.3	885	296	329	870	206	106	14.5	10.3	50.8	26.0
MAX	173	35	13100	1210	662	3640	290	222	45	72	206	237
MIN	12	19	24	136	144	330	130	42	3.8	2.5	3.9	.00
AC-FT	2320	1510	54420	18190	18270	53520	12270	6510	863	633	3130	1550

CAL YR 1984 TOTAL 39137.29 MEAN 107 MAX 13100 MIN .00 AC-FT 77630
WTR YR 1985 TOTAL 87312.14 MEAN 239 MAX 13100 MIN .00 AC-FT 173200

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, NM

LOCATION.--Lat 33°14'48", long 108°52'47", in NE¼NW¼ sec.23, T.12 S., R.20 W., Catron County, Hydrologic Unit 15040004, on left bank 0.2 mi upstream from hot springs, 5 mi south of Glenwood, 6 mi downstream from Whitewater Creek, and at mile 511.5.

DRAINAGE AREA.--1,653 mi^2.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1931, 1934, 1936-37, 1940-42, 1943-44(M), 1945-47. WSP 1283: Drainage area. WDR NM-78-1: 1977. WDR NM-79-1: 1973, 1975-77(P).

GAGE.--Water-stage recorder. Elevation of gage is 4,560 ft above National Geodetic Vetical Datum of 1929, from topographic map; prior to Feb. 15, 1934, at site 4.5 mi upstream at datum 98.82 ft higher.

REMARKS.--Estimated daily discharges: June 5-25. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 2,000 acres above station.

AVERAGE DISCHARGE.--58 years, 82.9 ft^3/s, 60,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft^3/s, Oct. 2, 1983, gage height, 18.15 ft recorded, 20.80 ft from outside floodmarks, from rating curve extended above 4,200 ft^3/s on basis of slope-area measurements at gage heights, 10.74 ft, 15.6 ft and 20.8 ft; minimum, 1.5 ft^3/s Aug. 6, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred Jan. 19 and Oct. 14, 1916, when discharges of 60,000 ft^3/s or greater were computed for station at Clifton, AZ. On Nov. 26, 1905, a peak of 25,000 ft^3/s was measured (by float-area method) at station at Alma (about 12 mi upstream, drainage area, 1,560 mi^2); a similar measurement of 21,000 ft^3/s was made at the Alma station for peak of Dec. 3, 1906.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 20	1445	1,460	4.44	Mar. 1	1645	1,140	3.51
Dec. 28	0630	*20,500	*14.83	Mar. 13	0100	5,070	7.43
Jan. 27	0015	1,090	3.52	Sept. 19	2000	1,020	3.30

Minimum discharge, 25 ft^3/s, Aug. 31, Sept. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	53	55	801	330	1030	422	377	77	36	72	27
2	32	53	55	587	261	1030	388	405	75	35	89	28
3	117	54	54	443	234	975	366	396	74	35	84	30
4	207	58	62	381	239	866	364	387	68	37	114	30
5	115	58	63	330	219	698	371	376	67	35	104	30
6	63	58	62	304	199	618	381	333	66	35	73	30
7	46	58	58	297	180	567	405	295	64	36	60	30
8	39	55	58	287	172	532	429	262	62	37	52	32
9	36	54	58	273	178	546	442	248	60	36	49	32
10	33	55	58	240	208	792	447	240	59	35	102	32
11	33	56	71	202	265	1330	437	228	57	32	215	32
12	34	56	210	186	211	2420	432	206	55	32	112	32
13	36	56	261	179	217	3730	431	179	54	34	94	30
14	37	57	287	159	245	1970	417	155	52	38	78	30
15	37	56	225	149	282	1600	410	139	50	37	66	32
16	38	56	170	140	323	1560	400	126	49	34	56	32
17	39	59	130	128	371	1410	383	122	48	32	46	32
18	40	61	123	118	452	1240	373	126	46	35	40	40
19	40	61	161	111	531	1110	358	126	45	37	40	279
20	41	59	890	106	613	1050	314	123	43	34	39	505
21	42	58	817	102	711	935	279	111	42	37	38	234
22	42	58	423	117	747	867	277	102	40	37	39	135
23	47	59	295	99	665	777	241	96	39	40	62	94
24	48	61	236	107	574	659	213	93	38	39	50	73
25	49	62	201	134	499	607	193	93	37	42	46	65
26	53	62	187	331	477	581	196	95	36	41	40	52
27	56	58	1140	880	487	562	214	95	36	42	55	49
28	58	55	12900	655	660	531	261	88	37	41	52	66
29	57	55	4350	498	---	526	286	84	38	47	43	327
30	56	55	1910	482	---	518	329	80	38	49	34	161
31	57	---	1110	439	---	478	---	77	---	69	30	---
TOTAL	1661	1716	26680	9265	10550	32115	10459	5863	1552	1186	2074	2601
MEAN	53.6	57.2	861	299	377	1036	349	189	51.7	38.3	66.9	86.7
MAX	207	62	12900	880	747	3730	447	405	77	69	215	505
MIN	32	53	54	99	172	478	193	77	36	32	30	27
AC-FT	3290	3400	52920	18380	20930	63700	20750	11630	3080	2350	4110	5160

CAL YR 1984 TOTAL 45999 MEAN 126 MAX 12900 MIN 21 AC-FT 91240
WTR YR 1985 TOTAL 105722 MEAN 290 MAX 12900 MIN 27 AC-FT 209700

09444200 BLUE RIVER NEAR CLIFTON, AZ

LOCATION.--Lat 33°17'27", long 109°11'44", in sec.6, T.2 S., R.31 E. (unsurveyed), Greenlee County, Hydrologic Unit 15040004, in Apache National Forest, on right bank 0.1 mi downstream from county road crossing, 0.9 mi upstream from Clear Creek, 8 mi upstream from mouth, and 17 mi northeast of Clifton.

DRAINAGE AREA.--506 mi^2.

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharge: Dec. 28, 29, Aug. 12-20, Sept. 3-15, 21-25. Records poor.

AVERAGE DISCHARGE.--17 years (water years 1969-85), 83.3 ft^3/s, 60,350 acre-ft/yr; median of yearly mean discharges, 41 ft^3/s, 29,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft^3/s Oct. 20, 1972, gage height, 22.56 ft, from rating curve extended above 960 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 1.4 ft^3/s Oct. 18-20, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1700	863	7.57	Mar. 15	1930	1,430	8.40
Dec. 28	0015	*7,630	*14.50	Sept. 19	1245	1,800	8.85
Jan. 26	1800	1,780	7.85	Sept. 28	1515	2,720	9.99
Mar. 12	1900	2,540	9.78				

Minimum daily discharge, 6.7 ft^3/s July 11, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	31	24	655	273	495	258	197	38	9.1	83	17
2	32	29	24	461	222	459	241	271	35	8.7	44	16
3	341	30	23	347	222	442	236	240	33	8.4	93	15
4	141	29	58	272	210	366	238	220	32	8.0	149	15
5	62	29	33	228	192	319	244	192	34	7.8	60	15
6	45	28	27	197	182	292	257	173	30	7.7	39	15
7	36	27	25	171	180	270	265	155	27	7.3	32	15
8	32	26	26	221	194	252	274	140	26	7.2	29	15
9	29	25	26	261	217	256	282	128	25	6.9	39	15
10	27	26	26	179	223	365	284	121	23	6.8	73	15
11	25	26	226	154	210	620	275	114	21	6.7	91	15
12	39	26	318	152	190	1520	266	105	20	6.9	32	15
13	33	25	456	146	211	1420	261	96	19	6.7	23	15
14	28	24	302	134	241	895	251	89	18	6.9	20	25
15	27	24	283	125	247	1080	246	84	17	9.4	20	30
16	39	24	202	119	262	855	244	80	16	17	19	24
17	36	26	175	111	291	786	238	77	14	10	19	21
18	33	26	177	104	338	692	235	76	13	23	19	142
19	31	25	238	103	367	667	222	73	12	18	19	500
20	31	25	706	103	397	577	206	69	12	33	19	132
21	31	25	550	103	434	520	195	66	12	32	18	51
22	31	24	294	104	416	479	209	64	13	27	29	29
23	30	24	219	104	356	426	179	60	15	26	32	22
24	31	27	177	142	296	384	166	57	14	19	32	22
25	37	27	150	164	283	366	159	54	13	15	43	22
26	37	30	134	713	281	350	167	50	12	13	45	21
27	34	26	1890	688	288	335	189	48	11	13	28	20
28	34	24	4510	515	402	317	340	45	11	23	23	683
29	33	23	1770	410	---	317	213	43	9.9	21	20	224
30	32	23	1060	420	---	304	193	41	9.6	26	22	75
31	32	---	780	345	---	277	---	40	---	28	20	---
TOTAL	1461	784	14909	7951	7625	16703	7033	3268	585.5	458.5	1234	2241
MEAN	47.1	26.1	481	256	272	539	234	105	19.5	14.8	39.8	74.7
MAX	341	31	4510	713	434	1520	340	271	38	33	149	683
MIN	25	23	23	103	180	252	159	40	9.6	6.7	18	15
AC-FT	2900	1560	29570	15770	15120	33130	13950	6480	1160	909	2450	4450

CAL YR	1984	TOTAL	29025.6	MEAN	79.3	MAX	4510	MIN	8.8	AC-FT	57570
WTR YR	1985	TOTAL	64253.0	MEAN	176	MAX	4510	MIN	6.7	AC-FT	127400

09444500 SAN FRANCISCO RIVER AT CLIFTON, AZ

LOCATION.--Lat 33°02'58", long 109°17'43", in SW¼SE¼ sec.30, T.4 S., R.30 E., Greenlee County, Hydrologic Unit 15040004, on downstream side of right pier at Railroad Boulevard Bridge (U.S. Highway 666), at Clifton, 9.9 mi upstream from mouth.

DRAINAGE AREA.--2,766 mi^2.

PERIOD OF RECORD.--October 1910 to March 1911, July 1911 to June 1912, September 1912, November 1912 to March 1913, May 1913 to July 1918, July 1927 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "San Francisco River at dam above Clifton" in 1911 and under both names in 1912.

REVISED RECORDS.--WSP 1049: 1911, 1913-15, 1917. WSP 1283: Drainage area. WSP 1313: 1927-30(M), 1932(M), 1934(M). WRD Ariz. 1972: 1917(M).

GAGE.--Water-stage recorder. Datum of gage is 3,436.16 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Apr. 7, 1959. Apr. 7, 1959, to Mar. 23, 1961, at site 1,140 ft downstream at datum 5.37 ft lower. July 18, 1980 to July 28, 1983, supplementary water-stage recorder 0.4 mi upstream on right bank at same datum and June 15, 1981 to Sept. 30, 1983, crest-stage gages at site. Since Aug. 4, 1983, supplementary water-stage recorder on right bank at main gage site at same datum.

REMARKS.--Estimated daily discharges: Mar. 11-15. Records good. Diversions for mining, municipal use, and for irrigation of about 2,700 acres above station.

AVERAGE DISCHARGE.--61 years (water years 1914-15, 1917, 1928-85) 212 ft^3/s, 153,600 acre-ft/yr; median of yearly mean discharges, 130 ft^3/s, 94,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,900 ft^3/s Oct. 2, 1983, gage height, 19.72 ft, from high-water mark, from rating curve extended above 30,000 ft^3/s on basis of slope-area measurement at gage height 17.0 ft; minimum daily, 6.1 ft^3/s June 21, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 20	2400	2,400	4.88	Mar. 16	0830	3,430	5.16
Dec. 28	1100	*27,400	*11.91	Sept. 19	1630	2,450	4.58
Jan. 27	1100	2,690	5.06	Sept. 28	2030	2,450	4.58

Minimum daily, 37 ft^3/s, July 12-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	135	117	1850	857	1410	734	737	157	49	265	72
2	112	132	117	1270	655	1530	680	849	148	48	184	68
3	335	128	117	974	559	1450	649	770	142	45	191	68
4	505	125	140	802	527	1350	641	714	137	45	307	68
5	338	125	191	642	484	1120	650	689	142	45	223	67
6	247	114	151	597	437	990	674	653	136	45	249	59
7	197	123	139	528	410	912	699	600	130	45	139	59
8	168	123	132	491	400	858	736	552	120	42	128	58
9	150	122	132	640	437	832	775	527	105	42	110	59
10	138	120	127	505	540	966	779	489	104	42	123	59
11	128	120	194	438	620	1500	766	471	98	40	341	61
12	125	120	566	397	533	1600	749	440	93	37	293	70
13	148	120	786	357	514	1500	742	401	92	37	215	68
14	133	117	845	330	579	1750	725	360	90	37	181	58
15	127	120	720	309	613	2200	717	328	84	39	150	56
16	135	117	570	369	648	2810	713	301	78	54	128	80
17	142	122	451	343	691	2310	697	280	73	46	112	76
18	134	127	426	321	775	2000	684	264	70	43	103	111
19	129	127	482	305	899	1800	671	268	67	92	91	1070
20	129	123	1360	289	997	1670	622	266	68	93	103	1240
21	129	120	1690	277	1140	1560	566	254	70	108	105	538
22	129	120	914	270	1330	1400	572	233	67	108	91	310
23	126	120	611	266	1250	1260	520	218	67	85	117	215
24	126	121	493	310	1070	1140	469	204	64	74	123	162
25	129	126	415	408	943	1040	432	198	63	65	131	128
26	141	135	362	723	874	988	418	191	58	59	159	108
27	142	134	897	2200	824	938	474	188	52	65	117	91
28	139	127	19100	1680	943	891	787	183	52	100	105	548
29	139	123	7610	1260	---	857	657	171	54	89	100	847
30	139	117	3930	1290	---	857	638	164	53	85	91	454
31	139	---	2640	1120	---	805	---	162	---	98	80	---
TOTAL	5122	3703	46425	21561	20549	42294	19636	12126	2734	1902	4855	6928
MEAN	165	123	1498	696	734	1364	655	391	91.1	61.4	157	231
MAX	505	135	19100	2200	1330	2810	787	849	157	108	341	1240
MIN	112	114	117	266	400	805	418	162	52	37	80	56
AC-FT	10160	7340	92080	42770	40760	83890	38950	24050	5420	3770	9630	13740

CAL YR 1984 TOTAL 97507 MEAN 266 MAX 19100 MIN 46 AC-FT 193400
WTR YR 1985 TOTAL 187835 MEAN 515 MAX 19100 MIN 37 AC-FT 372600

09445000 WILLOW CREEK DIVERSION FROM BLACK RIVER, NEAR MORENCI, AZ

LOCATION.--Lat 33°24'46", long 109°43'08", in SW¼ sec.23, T.1 N., R.25 E. (unsurveyed), Graham County, Hydrologic Unit 15040005, in San Carlos Indian Reservation, on left bank just downstream from end of diversion pipeline, 3.6 mi northeast of Point of Pines, 5.0 mi southeast of pumping plant on Black River, and 29 mi northwest of Morenci.

PERIOD OF RECORD.--April 1945 to current year.

GAGE.--Water-stage recorder and steel-edged rectangular weir. Datum of gage is 5,957.16 ft above National Geodetic Vertical Datum of 1929. Prior to June 26, 1946, at end of pipeline at that time, 3.5 mi upstream at datum about 50 ft higher.

REMARKS.--No estimated daily discharges. Records excellent. The entire flow consists of Black River (head of Salt River) water which is pumped into headwater of Willow Creek (tributary of Eagle Creek) for industrial and municipal supply in vicinity of Morenci.

AVERAGE DISCHARGE.--40 years, 11.4 ft^3/s, 8,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 28 ft^3/s May 18, 19, 21-26, 1970; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	10	11	.00	9.3	15	20	19	7.4	15	15	18
2	15	10	11	7.9	.41	16	21	22	9.8	15	15	20
3	15	10	11	14	.00	16	22	23	15	15	13	20
4	8.2	10	11	14	.00	16	16	23	15	14	15	19
5	5.5	10	7.2	14	.00	16	9.1	23	15	15	15	19
6	15	10	5.6	15	.00	16	21	23	15	15	15	20
7	15	10	5.6	15	7.1	17	22	23	15	15	15	20
8	16	10	5.6	16	13	17	22	23	14	15	15	20
9	16	10	5.6	16	14	16	21	23	15	15	13	20
10	16	10	5.6	16	15	16	23	23	15	15	15	20
11	16	10	5.6	16	15	15	16	23	4.9	15	15	20
12	16	10	5.3	16	16	4.0	22	23	.00	15	15	20
13	16	10	1.8	16	16	.07	23	22	.00	15	15	20
14	12	10	.00	16	14	2.8	23	22	.00	15	15	20
15	15	10	.00	16	16	5.3	22	20	.00	15	15	20
16	13	10	.00	16	16	5.7	7.9	21	.00	15	15	20
17	13	8.3	.00	16	16	5.6	.00	22	.00	15	15	19
18	14	10	.00	16	16	10	.00	22	14	14	15	20
19	15	7.4	.00	16	16	9.3	13	22	21	15	15	19
20	15	6.8	4.4	16	16	14	22	20	21	9.8	15	18
21	15	10	7.8	16	16	15	23	23	23	15	15	15
22	15	10	10	16	17	16	23	23	23	14	15	15
23	15	10	11	16	17	15	23	23	23	11	15	15
24	15	10	11	16	17	15	19	23	23	15	15	15
25	15	10	12	16	17	16	15	23	23	15	14	15
26	15	10	13	16	17	16	15	23	23	15	15	15
27	15	10	9.9	15	17	15	15	23	23	15	15	15
28	15	11	.00	16	17	16	15	23	18	15	15	15
29	15	11	.00	16	---	16	15	22	15	15	11	15
30	12	11	.00	16	---	17	15	23	15	15	5.4	15
31	10	---	.00	16	---	18	---	23	---	15	15	---
TOTAL	439.7	295.5	171.00	462.90	350.81	407.77	524.00	694	406.10	452.8	446.4	542
MEAN	14.2	9.85	5.52	14.9	12.5	13.2	17.5	22.4	13.5	14.6	14.4	18.1
MAX	16	11	13	16	17	18	23	23	23	15	15	20
MIN	5.5	6.8	.00	.00	.00	.07	.00	19	.00	9.8	5.4	15
AC-FT	872	586	339	918	696	809	1040	1380	805	898	885	1080

CAL YR 1984 TOTAL 6155.80 MEAN 16.8 MAX 24 MIN .00 AC-FT 12210
WTR YR 1985 TOTAL 5192.98 MEAN 14.2 MAX 23 MIN .00 AC-FT 10300

09447000 EAGLE CREEK ABOVE PUMPING PLANT, NEAR MORENCI, AZ

LOCATION.--Lat 33°04'18", long 109°27'10", in SE¼NE¼ sec.22, T.4 S., R.28 E., Greenlee County, Hydrologic Unit 15040005, on left bank 3 mi upstream from Phelps Dodge Corp. pumping plant, 5 mi west of Morenci, and 13 mi upstream from mouth.

DRAINAGE AREA.--613 mi^2.

PERIOD OF RECORD.--April 1944 to current year.

REVISED RECORDS.--WSP 1850-C: 1966.

GAGE.--Water-stage recorder. Datum of gage is 3,697.6 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 25, 1984 at datum 3.4 ft higher. Jan. 30, 1978 to Sept. 1, 1980, water-stage recorder, Parshall flume and weir 200 ft downstream at same datum. April 1944 to Jan. 30, 1978, Sept. 1, 1980 to July 31, 1981, at site 1,200 ft downstream at datum 6.37 ft lower. Nov. 4, 1980 to Aug. 1, 1981, supplementary water-stage recorder at present site and datum. Nov. 15, 1952 to Nov. 4, 1980, supplementary water-stage recorder 1,100 ft downstream on right bank at datum 6.37 ft lower. Aug. 23, 1950 to Nov. 15, 1952, supplementary water-stage recorder at site 1,300 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Jan. 6-8, 12-17. Records poor. Diversions above station for irrigation of about 500 acres, mostly above Willow Creek. Water from Black River was pumped into Eagle Creek basin, 52 mi upstream from this station, for the entire year and water was pumped from wells into Eagle Creek near Double Circle Ranch below Willow Creek for 9 months. The monthly quantities pumped are shown in table below. Diversion by pumping for industrial and municipal use in and near Morenci and Clifton are made from Eagle Creek, 3 mi downstream from this station and from San Francisco River near Clifton. Monthly quantities diverted are shown in the table below; 98 percent of the pumpage was from Eagle Creek.

AVERAGE DISCHARGE (unadjusted).--41 years, 59.01 ft^3/s, 42,750 acre-ft/yr; median of yearly mean discharges, 37 ft^3/s, 26,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,400 ft^3/s Oct. 2, 1983, gage height, 13.04 ft, from rating curve extended above 730 ft^3/s on basis of slope-area measurements at gage heights 10.5 ft and 13.04 ft; minimum, 2.9 ft^3/s June 25, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*)

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	0400	808	4.45	July 19	0030	1,560	3.70
Dec. 28	0330	*8,400	*9.8	July 22	2000	1,390	3.43
Jan. 27	0700	3,800	6.34	Aug. 1	0600	1,850	4.11
Mar. 16	0400	1,250	4.94	Aug. 2	2330	2,460	4.92

Minimum daily discharge, 17 ft^3/s Sept. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	37	32	391	303	248	93	103	48	28	776	18
2	40	36	32	231	232	241	84	159	48	26	209	17
3	71	35	32	152	187	219	78	174	37	26	515	17
4	75	34	37	137	158	202	71	148	34	27	332	19
5	69	35	37	130	121	162	70	121	41	26	110	19
6	48	35	35	125	77	124	59	106	40	33	82	18
7	38	35	33	125	51	86	60	94	38	35	107	18
8	42	35	30	120	49	59	65	86	35	28	151	24
9	41	34	29	297	73	47	67	78	34	26	88	28
10	41	33	29	290	168	41	72	72	33	26	80	32
11	41	34	39	208	281	47	69	67	32	38	72	34
12	45	34	48	150	253	59	60	66	32	28	65	36
13	44	33	168	120	283	276	53	65	30	28	60	35
14	41	32	275	110	303	222	58	60	26	30	54	34
15	42	32	180	100	279	356	58	58	24	46	48	34
16	42	32	125	95	264	812	56	55	23	34	42	40
17	41	34	99	80	261	328	52	52	22	29	36	35
18	38	34	92	75	260	166	49	50	22	33	32	63
19	37	32	120	75	257	123	47	50	22	346	27	80
20	38	32	349	67	256	100	47	48	21	64	32	72
21	41	32	494	63	256	103	48	46	20	237	32	54
22	41	29	216	63	291	96	67	46	28	280	29	42
23	41	33	144	65	330	88	64	46	34	102	28	35
24	43	36	112	160	286	84	49	45	36	54	28	33
25	42	38	91	418	236	88	47	44	37	35	54	32
26	41	41	78	976	199	94	45	43	36	32	49	33
27	41	38	670	1230	162	105	49	42	36	56	39	33
28	40	35	5460	883	162	122	216	42	36	71	33	131
29	40	35	2310	287	---	117	195	41	36	43	29	135
30	40	35	1360	482	---	115	120	42	31	45	29	65
31	40	---	704	430	---	103	---	44	---	54	26	---
TOTAL	1363	1030	13460	8135	6038	5033	2168	2193	972	1966	3294	1266
MEAN	44.0	34.3	434	262	216	162	72.3	70.7	32.4	63.4	106	42.2
MAX	75	41	5460	1230	330	812	216	174	48	346	776	135
MIN	37	29	29	63	49	41	45	41	20	26	26	17
AC-FT	2700	2040	26700	16140	11980	9980	4300	4350	1930	3900	6530	2510
(*)	1010	876	545	0	0	0	391	497	837	794	637	516
(**)	1760	1750	1740	1700	1590	1140	1450	1740	1330	1410	1390	1420

CAL YR 1984 TOTAL 32641 MEAN 89.2 MAX 5460 MIN 17 AC-FT 64740 * 6350 ** 20100
WTR YR 1985 TOTAL 46918 MEAN 129 MAX 5460 MIN 17 AC-FT 93060 * 6100 ** 18420

* Pumpage in acre-feet, into Eagle Creek from Eagle Creek Wells.
** Pumpage in acre-feet, to Clifton and Morenci, from San Francisco River and Eagle Creek.

09447800 BONITA CREEK NEAR MORENCI, AZ

LOCATION.--Lat 32°57'20", long 109°31'50", in SE¼NW¼ sec.36, T.5 S., R.27 E., Graham County, Hydrologic Unit 15040005, on left bank 2.0 mi upstream from intake of City of Safford water supply, 6.3 mi upstream from mouth, and 12.8 mi southwest of Morenci, Arizona.

DRAINAGE AREA.--302 mi^2.

PERIOD OF RECORD.--August 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Two crest-stage gages 440 ft upstream on right and left banks.

REMARKS.--No estimated daily discharges. Records fair except those above 20 ft^3/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,400 ft^3/s Oct. 2, 1983, gage height, 17.3 ft, from rating curve extended above 560 ft^3/s on basis of slope-area measurement of peak flow; minimum, 0.68 ft^3/s Dec. 20-23, 1982, gage height, 1.50 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 20, 1972, 10,000 ft^3/s from slope-area measurement made by City of Safford at site about 2 mi downstream. Flood of June 27, 1981, 1,340 ft^3/s from slope-area measurement at present site, gage height, 5.6 ft from floodmark.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	0400	*269	*3.60

Minimum discharge, 3.2 ft^3/s, July 3, gage height, 1.62 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	5.6	6.6	18	73	21	8.0	7.7	5.3	3.7	6.3	5.3
2	3.5	5.6	6.3	12	50	19	7.7	8.0	5.0	3.7	5.9	5.3
3	4.7	5.6	6.3	9.2	37	17	7.3	7.0	5.0	3.7	5.6	5.6
4	4.5	5.6	6.3	7.7	28	16	7.7	6.3	5.3	3.7	5.3	5.3
5	4.2	5.6	6.3	7.0	23	14	7.3	6.6	5.3	3.8	5.0	5.3
6	4.0	5.6	5.9	6.6	20	14	7.3	6.6	5.0	8.4	4.7	5.3
7	4.2	5.6	5.9	6.3	19	12	7.3	6.6	5.0	7.0	6.0	5.3
8	4.2	5.6	5.9	5.9	19	12	8.0	6.6	4.7	5.9	7.3	5.3
9	4.2	5.9	5.6	5.9	27	11	7.7	6.6	4.7	5.6	5.9	5.3
10	4.2	6.3	5.6	34	89	10	7.7	6.6	4.7	5.3	5.6	5.3
11	4.2	6.3	5.9	25	96	10	7.7	7.0	4.7	5.3	6.6	5.9
12	4.2	6.3	5.9	16	60	11	7.7	6.6	4.5	5.3	5.9	5.9
13	4.2	6.3	8.0	12	45	11	7.3	6.3	4.7	5.0	5.6	5.6
14	4.2	6.3	13	9.7	42	11	7.3	6.3	4.7	5.9	5.3	5.3
15	4.5	6.3	9.7	8.4	37	14	7.3	6.3	4.7	5.6	5.0	5.3
16	4.7	6.6	7.3	7.7	34	19	7.3	5.9	4.7	5.3	4.7	5.3
17	4.7	6.6	6.3	7.7	31	23	7.3	5.9	4.7	4.7	4.7	5.6
18	4.7	6.3	5.6	7.3	28	21	7.3	5.9	4.7	4.7	4.5	9.8
19	5.0	6.3	5.3	7.0	24	18	7.7	5.9	4.7	5.0	4.7	10
20	5.0	6.3	11	7.0	22	15	7.7	5.9	4.7	5.6	4.7	8.8
21	5.0	6.6	16	6.6	21	14	7.7	5.9	4.7	6.1	4.5	7.3
22	5.0	6.6	9.7	6.6	23	13	7.7	5.6	4.7	6.3	4.5	6.6
23	5.3	6.6	7.7	6.6	28	11	7.3	5.6	4.5	5.9	4.2	6.3
24	5.3	6.6	7.0	7.0	34	9.7	7.0	5.6	4.5	5.0	5.6	5.9
25	5.3	6.6	6.6	7.3	36	9.2	7.3	5.6	4.2	4.7	6.3	5.9
26	5.3	6.6	5.9	18	22	8.8	8.4	5.6	4.2	4.5	6.3	5.6
27	5.3	6.6	11	143	19	8.4	9.7	5.6	4.0	8.0	5.9	5.6
28	5.0	6.6	139	124	18	8.4	11	5.6	3.7	11	5.6	14
29	5.3	6.6	128	82	---	8.8	8.8	5.6	4.0	6.6	5.9	14
30	5.3	6.6	63	149	---	8.8	7.7	5.6	3.7	5.6	5.9	9.2
31	5.3	---	32	116	---	8.4	---	5.3	---	6.3	5.6	---
TOTAL	144.0	186.6	564.6	886.5	1005	407.5	233.2	192.2	139.0	173.2	169.6	201.2
MEAN	4.65	6.22	18.2	28.6	35.9	13.1	7.77	6.20	4.63	5.59	5.47	6.71
MAX	5.3	6.6	139	149	96	23	11	8.0	5.3	11	7.3	14
MIN	3.5	5.6	5.3	5.9	18	8.4	7.0	5.3	3.7	3.7	4.2	5.3
AC-FT	286	370	1120	1760	1990	808	463	381	276	344	336	399

CAL YR 1984 TOTAL 2734.2 MEAN 7.47 MAX 139 MIN 2.9 AC-FT 5420
WTR YR 1985 TOTAL 4302.6 MEAN 11.8 MAX 149 MIN 3.5 AC-FT 8530

09448500 GILA RIVER AT HEAD OF SAFFORD VALLEY, NEAR SOLOMON, AZ

LOCATION.--Lat 32°52'06", long 109°30'38", in SE¼NE¼ sec.31, T.6 S., R.28 E., Graham County, Hydrologic Unit 15040005, on left bank 0.6 mi downstream from intake of Brown Canal, 8 mi northeast of Solomon, and 17 mi downstream from San Francisco River. Records include flow of Brown Canal, which is measured 2,000 ft downstream from intake.

DRAINAGE AREA.--7,896 mi^2.

PERIOD OF RECORD.--April 1914 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1932 and October 1940 to September 1949 published as "near Solomonsville" and October 1932 to October 1933 and May 1935 to September 1940 as "below Bonita Creek near Solomonsville."

REVISED RECORDS.--WSP 1059: 1914, 1916-17, 1923(M), 1924-25, 1927, 1929-31(M). WSP 1179: 1915, 1918-19(M). WSP 1313: 1934. WSP 1733: 1923.

GAGE.--Water-stage recorder. Datum of gage is 3,059.92 ft above National Geodetic Vertical Datum of 1929. Prior to July 8, 1980, at datum 4.96 ft higher. See WSP 1733 for history of changes prior to Jan. 1, 1941. Supplementary water-stage recorder and Parshall flume on Brown Canal.

REMARKS.--Estimated daily discharges: Sept. 6, 7. Records fair. Records show water reaching head of Safford Valley and include water diverted to Brown Canal. Diversions above station for mining, municipal use, and for irrigation of about 17,500 acres, much of it by pumping from ground water.

COOPERATION.--Record for Brown Canal furnished by Gila Water Commissioner.

AVERAGE DISCHARGE.--71 years, 480 ft^3/s, 347,800 acre-ft/yr; median of yearly mean discharges, 320 ft^3/s, 232,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 132,000 ft^3/s Oct. 2, 1983, gage height, 20.8 ft, from rating curve extended above 52,000 ft^3/s on basis of slope-area measurements at 14.40 ft and 20.8 ft; minimum, 11 ft^3/s June 25, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*), from rating curve extended above 52,000 ft^3/s on basis of slope-area measurements at 14.40 ft and 20.8 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	0800	5,650	11.30	Mar. 13	1530	8,940	10.79
Dec. 29	0800	*60,200	*16.95	Sept. 19	2200	7,260	10.27
Jan. 28	0700	7,840	10.35				

Minimum daily discharge, 106 ft^3/s July 10, 12-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	263	252	5300	3170	2730	1550	1290	345	124	404	173
2	212	255	247	4060	2790	2930	1450	1460	336	117	509	158
3	373	255	245	2890	2450	2890	1380	1450	326	118	625	143
4	980	248	257	2310	2330	2810	1340	1420	310	113	618	148
5	598	245	298	1950	2220	2550	1320	1390	301	110	556	141
6	466	234	280	1780	2110	2400	1330	1350	292	116	500	132
7	380	231	272	1630	1950	2310	1350	1310	287	113	362	122
8	334	235	275	1530	1860	2220	1410	1250	289	111	360	122
9	305	236	274	1580	1880	2160	1440	1200	268	109	326	121
10	287	229	269	1560	2080	2240	1470	1150	255	106	324	122
11	270	230	276	1420	2150	2740	1470	1100	245	109	379	119
12	260	231	617	1350	2100	3920	1440	1080	232	106	526	122
13	269	228	968	1290	1970	7350	1410	1040	217	106	402	127
14	268	221	2130	1210	2070	7550	1390	939	208	108	342	125
15	250	224	1920	1150	2160	5300	1370	828	196	110	297	129
16	242	221	1620	1110	2220	5470	1380	747	186	124	264	262
17	244	225	1250	1070	2240	4270	1380	684	177	128	243	184
18	240	238	1080	998	2370	3390	1380	619	168	118	215	196
19	233	237	1150	942	2450	2830	1370	593	165	179	206	2020
20	233	231	2470	890	2530	2470	1320	568	158	512	281	2890
21	237	228	5120	841	2640	2860	1270	542	156	286	262	1210
22	240	234	3700	834	2930	2980	1230	509	154	322	231	687
23	240	240	2390	827	3110	2550	1200	488	153	302	202	471
24	249	242	1800	882	2760	2250	1140	463	151	211	215	387
25	260	246	1380	1010	2450	2140	1090	441	150	183	220	357
26	271	256	1240	1170	2360	2030	1010	426	142	158	249	345
27	276	261	1130	4780	2290	1940	1040	404	136	163	235	347
28	274	259	24800	7140	2330	1820	1270	387	129	729	200	349
29	268	258	34800	5300	---	1700	1310	369	131	309	194	1770
30	268	258	14700	4540	---	1690	1270	353	134	235	186	876
31	269	---	8160	3960	---	1620	---	346	---	315	183	---
TOTAL	9521	7199	115370	67304	65970	94110	39780	26196	6397	5950	10116	14355
MEAN	307	240	3722	2171	2356	3036	1326	845	213	192	326	478
MAX	980	263	34800	7140	3170	7550	1550	1460	345	729	625	2890
MIN	212	221	245	827	1860	1620	1010	346	129	106	183	119
AC-FT	18880	14280	228800	133500	130900	186700	78900	51960	12690	11800	20070	28470

CAL YR 1984 TOTAL 226413 MEAN 619 MAX 34800 MIN 90 AC-FT 449100
WTR YR 1985 TOTAL 462268 MEAN 1266 MAX 34800 MIN 106 AC-FT 916900

09466500 GILA RIVER AT CALVA, AZ
(National stream-quality accounting network station)

LOCATION.--Lat 33°11'08", long 110°13'10", in SW¼ sec.8, T.3 S., R.21 E. (unsurveyed), Graham County, Hydrologic Unit 15040005, in San Carlos Indian Reservation, on Southern Pacific Railroad bridge at head of San Carlos Reservoir, 2.0 mi west of Calva.

DRAINAGE AREA.--11,470 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,517.29 ft, National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1954, and Aug. 25, 1958, to Dec. 31, 1962, at datum 2.52 ft lower. Oct. 1, 1954, to Aug. 24, 1958, at datum 5.52 ft lower. Dec. 31, 1962, to Oct. 20, 1972, at site 530 ft downstream at datum 3.65 ft lower. Oct. 20, 1972, to Sept. 30, 1974, supplementary gage at bridge on U.S. Highway 70, 6.2 mi upstream at datum 2,560.19 ft, NGVD.

REMARKS.--Estimated daily discharges: Dec. 24-26, Jan. 2-6, Feb. 1-4, Mar. 18, 19, July 16, and Sept. 24-26. Records poor. Diversion above station for irrigation of about 69,000 acres, metallurgical treatment of ores, and municipal uses.

AVERAGE DISCHARGE.--56 years, 325 ft^3/s, 235,500 acre-ft/yr; median of yearly mean discharges, 210 ft^3/s, 152,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150,000 ft^3/s Oct. 3, 1983, gage height, 23.1 ft, from rating curve extended above 87,000 ft^3/s on basis of area-velocity, road over flow computations of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1914, probably in excess of 100,000 ft^3/s Jan. 20, 1916, determined on basis of peak discharge at stations near Solomon and at Kelvin.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 22	0800	4,600	5.36	Feb. 24	1345	3,110	5.06
Dec. 29	2130	*53,700	*14.53	Mar. 14	1345	8,150	7.81
Jan. 29	0130	5,520	5.72				

Minimum daily discharge, 7.4 ft^3/s July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	274	333	7100	3000	1990	1510	1400	310	38	154	24
2	200	287	320	5800	2690	2620	1450	1500	286	34	174	25
3	199	275	302	4800	2440	2710	1310	1600	316	28	273	27
4	264	281	295	3800	2200	2620	1240	1580	342	28	313	28
5	585	279	286	3000	1920	2440	1140	1550	330	25	407	28
6	505	282	323	2400	1820	2260	1090	1430	323	27	407	30
7	472	281	335	1700	1720	2010	1060	1380	263	30	302	39
8	419	275	328	1770	1390	1750	1070	1260	220	30	239	33
9	389	270	336	1800	1360	1560	1090	1180	185	25	200	24
10	351	264	320	1730	1310	1360	1280	1110	167	23	194	28
11	307	255	314	1510	1530	1380	1460	1010	145	20	180	98
12	286	253	315	1410	1870	1910	1450	865	121	18	162	79
13	280	251	531	1230	1620	3850	1420	764	114	18	219	53
14	257	241	890	1130	1630	7610	1460	745	96	16	249	41
15	253	236	1440	1030	1680	5310	1480	744	90	14	186	72
16	254	234	1380	1000	1710	4680	1450	643	80	9.0	121	64
17	262	241	1240	1140	1820	4530	1430	556	74	8.4	89	24
18	248	232	1040	1030	1860	4000	1340	565	71	7.4	79	50
19	231	263	950	937	2010	3500	1350	491	57	41	73	127
20	223	257	1020	885	2140	3420	1320	479	55	146	66	1420
21	233	254	2520	853	2260	3320	1410	443	57	223	64	1070
22	243	259	4310	742	2540	2980	1340	424	55	187	65	624
23	259	267	3320	661	3010	2630	1330	418	57	123	65	458
24	276	275	2500	661	2910	2360	1390	358	50	111	62	345
25	275	282	1800	884	2550	2140	1300	397	47	92	57	289
26	275	304	1400	1340	2330	1910	1070	368	40	66	55	260
27	289	298	1200	2570	2130	1750	965	350	40	44	52	250
28	296	306	11900	4870	2060	1620	1200	353	40	52	46	258
29	291	321	38000	4580	---	1600	1620	336	45	223	36	559
30	284	329	24800	3500	---	1500	1550	332	43	235	28	815
31	282	---	11000	3300	---	1560	---	316	---	150	31	---
TOTAL	9176	8126	115048	69163	57510	84880	39575	24947	4119	2091.8	4648	7242
MEAN	296	271	3711	2231	2054	2738	1319	805	137	67.5	150	241
MAX	585	329	38000	7100	3010	7610	1620	1600	342	235	407	1420
MIN	188	232	286	661	1310	1360	965	316	40	7.4	28	24
AC-FT	18200	16120	228200	137200	114100	168400	78500	49480	8170	4150	9220	14360

CAL YR 1984 TOTAL 207963.0 MEAN 568 MAX 38000 MIN 22 AC-FT 412500
WTR YR 1985 TOTAL 426525.8 MEAN 1169 MAX 38000 MIN 7.4 AC-FT 846000

09466500 GILA RIVER AT CALVA, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1984 17...	1100	267	2300	8.50	21.0	15.5	26	708	8.0	87	--
NOV 08...	1000	275	2390	8.40	19.0	13.0	38	710	10.8	111	18
DEC 05...	1000	287	2140	8.60	6.0	9.0	54	714	11.4	--	19
JAN 1985 29...	1400	3540	362	8.20	12.0	9.0	950	708	10.8	--	250
FEB 20...	1200	2200	610	7.40	23.0	13.0	23	703	12.8	132	--
APR 02...	1300	1450	1140	--	--	18.0	--	714	9.4	107	38
MAY 13...	1330	800	1030	8.90	--	24.0	71	707	8.2	105	16
JUN 10...	1230	157	2760	7.30	38.0	29.0	18	706	7.6	--	<10
JUL 09...	1030	28	4350	7.30	37.0	27.0	5.9	711	8.8	120	28
AUG 12...	1200	176	2570	--	32.0	24.0	390	771	0.9	11	35
SEP 03...	1030	30	4190	6.80	32.0	24.0	26	708	9.3	121	17

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)
OCT 1984 17...	270	--	390	140	110	27	350	8	7.2	295	2.0
NOV 08...	K28	84	360	130	100	27	340	8	6.8	274	6.0
DEC 05...	100	--	380	160	110	26	320	7	6.7	--	--
JAN 1985 29...	--	--	88	0	25	6.3	>5.0	--	1.8	--	--
FEB 20...	--	--	140	36	41	10	>5.0	--	2.8	--	--
APR 02...	K38	310	--	--	--	--	--	--	--	--	--
MAY 13...	K37	410	210	86	59	14	160	5	5.3	7.0	138
JUN 10...	2	2	480	220	130	38	510	10	10	--	--
JUL 09...	--	--	590	360	150	53	680	13	13	--	--
AUG 12...	560	1700	420	150	120	29	430	9	9.2	--	--
SEP 03...	78	240	530	300	130	49	750	15	12	--	--

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.
> Actual value is known to be greater than value shown.

09466500 GILA RIVER AT CALVA, AZ--Continued

WATER QUALITY DATA

DATE	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
OCT 1984 17...	244	240	460	1.6	--	1430	--	--	296	1.30	--
NOV 08...	230	220	440	1.6	--	1380	--	--	103	1.00	--
DEC 05...	218	210	450	1.6	39	1320	1300	1.8	134	1.30	1.10
JAN 1985 29...	89	45	31	0.8	--	244	--	--	2990	0.30	--
FEB 20...	108	63	73	0.8	--	536	--	--	1160	0.40	--
APR 02...	--	--	--	--	--	--	--	--	532	0.70	0.74
MAY 13...	119	110	200	1.1	--	690	--	--	242	0.70	--
JUN 10...	258	340	700	1.6	40	1880	1900	2.6	58	1.70	1.40
JUL 09...	235	55	130	1.6	--	2760	--	--	26	0.30	--
AUG 12...	269	300	590	1.6	37	1680	1700	2.3	1300	2.00	2.00
SEP 03...	225	500	1100	0.4	--	2630	--	--	63	<0.10	--

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT 1984 17...	0.03	--	0.67	0.7	2.0	8.9	0.46	--	--	--	--
NOV 08...	0.04	--	0.56	0.6	1.6	7.1	0.22	--	--	--	--
DEC 05...	<0.01	0.01	--	0.2	1.5	6.6	0.28	0.09	0.07	0.21	10
JAN 1985 29...	0.36	--	8.1	8.5	8.8	39	10.0	--	--	--	--
FEB 20...	0.06	--	1.2	1.3	1.7	7.5	1.00	--	--	--	--
APR 02...	0.02	0.02	0.78	0.8	1.5	6.6	0.95	0.14	<0.01	--	--
MAY 13...	0.06	--	0.74	0.8	1.5	6.6	0.38	--	--	--	--
JUN 10...	0.03	0.07	0.47	0.5	2.2	9.7	0.17	0.03	0.01	0.03	20
JUL 09...	0.10	--	0.6	0.7	1.0	4.4	0.11	--	--	--	--
AUG 12...	0.05	0.07	2.0	2.1	4.1	18	0.47	0.14	0.01	0.03	20
SEP 03...	0.06	--	1.0	1.1	--	--	0.03	--	--	--	--

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
OCT 1984 17...	4	4	<100	--	390	<1	<1	8	3	--	120
NOV 08...	5	4	<100	--	380	<1	<1	--	2	--	110
DEC 05...	4	4	<100	<10	350	<1	<1	11	8	<1	80
JAN 1985 29...	8	3	33	--	50	<1	1	14	3	--	1100
FEB 20...	5	2	30	--	80	<1	<1	16	1	--	530
APR 02...	5	--	--	--	140	<1	--	15	--	--	170
MAY 13...	3	3	47	--	180	<1	<1	23	<1	--	60
JUN 10...	5	6	110	<2	560	<1	<3	10	<1	<9	24
JUL 09...	5	4	300	--	900	1	1	3	<1	--	13
AUG 12...	8	8	100	<10	530	<1	<1	16	<1	<1	90
SEP 03...	5	5	<100	--	920	1	1	12	<1	--	18

< Actual value is known to be less than value shown.

09466500 GILA RIVER AT CALVA, AZ--Continued

WATER QUALITY DATA

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)
OCT 1984 17...	5	11000	20	5	<1	--	370	--	<0.1	--	--
NOV 08...	6	9400	20	5	<1	--	270	--	<0.1	--	--
DEC 05...	3	--	40	5	2	220	290	10	<0.1	<0.1	1
JAN 1985 29...	2	170000	310	270	<1	--	6700	--	0.4	--	--
FEB 20...	7	88000	20	48	1	--	2200	3	0.7	--	--
APR 02...	--	--	--	40	--	--	780	--	0.2	--	--
MAY 13...	6	16000	9	22	3	--	450	3	0.1	--	--
JUN 10...	60	--	<9	4	<30	270	80	17	<0.1	--	<30
JUL 09...	3	340	50	<1	3	--	60	30	<0.1	--	--
AUG 12...	5	--	20	28	<1	250	1300	<10	<0.1	--	11
SEP 03...	6	750	30	2	<1	--	50	20	<0.1	--	--

DATE	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 1984 17...	--	1	1	<1	--	--	80	<10	45	912	657
NOV 08...	--	1	1	<1	--	--	60	10	33	299	222
DEC 05...	<2	1	1	<1	1000	25	80	10	12	1970	1530
JAN 1985 29...	--	1	<1	<1	--	--	760	27	84	31800	304000
FEB 20...	--	<1	1	<1	--	--	360	<3	30	4680	27800
APR 02...	--	<1	--	--	--	--	170	--	15	3580	14000
MAY 13...	--	<1	<1	<1	--	--	90	10	39	1160	2510
JUN 10...	3	2	2	<1	1300	<18	90	32	51	130	55
JUL 09...	--	1	2	<1	--	--	60	80	73	35	2.6
AUG 12...	1	<1	1	<1	1000	32	190	10	94	1700	808
SEP 03...	--	2	2	<1	--	--	30	40	75	65	5.3

< Actual value is known to be less than value shown.

09468500 SAN CARLOS RIVER NEAR PERIDOT, AZ

LOCATION.--Lat 33°17'47", long 110°27'03", in SE¼ sec.36, T.1 S., R.18 E. (unsurveyed), Gila County, Hydrologic Unit 15040007, in San Carlos Indian Reservation, on U.S. Highway 70 bridge, 0.9 mi south of Peridot.

DRAINAGE AREA.--1,026 mi^2.

PERIOD OF RECORD.--August 1910 to January 1911 (gage heights only), April 1914 to July 1915, August to September 1915 (monthly discharge only), October 1929 to current year. Prior to October 1929 published as "at San Carlos."

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,542.29 ft above National Geodetic Vertical Datum of 1929 (Arizona Highway Department bench mark). See WSP 1713 or 1733 for history of changes prior to Feb. 1, 1942. Feb. 1, 1942, to Aug. 13, 1970, at sites 1.9 mi upstream at different datums. Aug 14, 1970, to Sept. 30, 1980, at site 1.8 mi upstream at datum 2,578.90 ft, National Geodetic Vertical Datum of 1929. Supplementary water-stage recorder Dec. 21, 1967, to July 2, 1968, at site 2.2 mi downstream at datum in use prior to Feb. 1, 1942; Jan. 31, 1979, to Sept. 30, 1980, at present site and datum.

REMARKS.--Estimated daily discharges: Oct. 6-9, Dec. 23-26, Jan. 14-16, Feb. 3-5, Mar. 8-20, May 27, July 6, 7, 28, 29. Records poor. Diversions above station for irrigation of about 600 acres. Small inflow from sewage treatment system about 3.6 mi upstream. Flow regulated to some extent since June 15, 1979, by Talkalai Reservoir; capacity of reservoir is about 6,000 acre-ft.

AVERAGE DISCHARGE.--56 years (water years 1930-85), 55.7 ft^3/s, 40,350 acre-ft/yr; median of yearly mean discharges, 32 ft^3/s, 23,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,600 ft^3/s Mar. 14, 1941, gage height, 11.4 ft, site and datum then in use, from rating curve extended above 23,000 ft^3/s on basis of rate of change in storage in San Carlos Reservoir; maximum gage height 14.8 ft, Dec. 22, 1965, site and datum then in use; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 13	0900	2,710	6.31	Jan. 8	2100	2,860	6.37
Dec. 20	1330	2,290	6.17	Jan. 26	2045	2,310	6.21
Dec. 27	2300	*4,470	*7.15				

Minimum daily discharge, 7.2 ft^3/s Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	22	22	263	170	153	38	50	24	9.6	17	9.0
2	178	21	22	158	126	135	37	39	21	9.6	15	9.0
3	589	21	22	109	122	99	35	31	20	9.8	16	9.3
4	32	21	22	89	117	93	30	23	21	9.5	16	9.1
5	29	21	22	70	113	89	27	22	23	9.1	15	9.3
6	25	22	22	67	113	84	24	22	19	9.3	14	9.3
7	25	22	22	60	102	82	24	22	18	9.5	13	9.3
8	22	22	22	429	111	74	25	21	16	9.6	13	9.3
9	22	22	22	1250	172	70	28	22	17	9.8	13	9.3
10	22	22	22	481	416	70	27	21	21	9.5	12	9.3
11	22	22	23	168	387	70	24	17	21	9.8	84	11
12	22	22	66	129	128	70	26	17	21	9.3	17	14
13	22	22	1390	117	119	70	27	17	23	9.1	13	9.5
14	22	22	1020	117	114	70	24	16	25	9.3	11	12
15	22	22	429	105	109	200	23	16	26	10	11	9.3
16	22	22	269	97	102	270	23	18	28	27	11	7.7
17	22	22	269	89	98	200	24	20	29	13	10	7.2
18	22	22	578	74	94	180	23	20	26	12	9.9	9.8
19	22	22	518	71	92	160	25	18	24	13	9.6	12
20	22	22	1240	68	90	150	29	18	14	13	10	13
21	22	22	820	65	89	139	25	15	8.3	12	9.9	30
22	22	22	199	62	317	125	31	16	9.3	12	9.6	21
23	22	23	158	61	1160	105	33	16	9.0	12	9.1	14
24	22	23	139	61	492	101	28	16	9.4	12	8.5	12
25	22	23	126	62	210	78	23	17	8.9	11	8.8	10
26	22	23	113	496	163	56	26	16	9.7	10	8.1	9.6
27	22	23	1200	1230	144	50	37	15	13	10	7.8	8.9
28	22	22	3020	630	130	50	60	15	13	10	8.6	118
29	22	22	2310	201	---	47	54	17	12	9.8	8.4	76
30	22	22	1120	499	---	43	47	23	9.7	9.8	8.1	56
31	22	---	501	357	---	39	---	25	---	22	7.8	---
TOTAL	1430	661	15728	7735	5600	3222	907	641	539.3	351.4	425.2	553.2
MEAN	46.1	22.0	507	250	200	104	30.2	20.7	18.0	11.3	13.7	18.4
MAX	589	23	3020	1250	1160	270	60	50	29	27	84	118
MIN	22	21	22	60	89	39	23	15	8.3	9.1	7.8	7.2
AC-FT	2840	1310	31200	15340	11110	6390	1800	1270	1070	697	843	1100

CAL YR 1984 TOTAL 29524.0 MEAN 80.7 MAX 3020 MIN 3.4 AC-FT 58560
WTR YR 1985 TOTAL 37793.1 MEAN 104 MAX 3020 MIN 7.2 AC-FT 74960

09469000 SAN CARLOS RESERVOIR AT COOLIDGE DAM, AZ

LOCATION.--Lat 33°10'32", long 110°31'38", in NW¼ sec.17, T.3 S., R.18 E. (unsurveyed), Gila County, Hydrologic Unit 15040005, in San Carlos Indian Reservation, at right intake tower of Coolidge Dam on Gila River.

DRAINAGE AREA.--12,886 mi^2.

REVISED RECORDS.--WSP 1049: 1929, 1934, 1937-38. WSP 1283: Drainage area.

PERIOD OF RECORD.--November 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Jan. 15, 1937, series of stakes with tops at known elevations for reference points on right bank about 1,000 ft upstream from dam. Jan. 15, 1937, to Dec. 31, 1947, water-stage recorder at present site at datum 0.72 ft lower.

REMARKS.--Reservoir is formed by concrete multiple-dome dam. Dam completed Oct. 25, 1928; storage began Nov. 15, 1928. Usable capacity (from capacity table computed by San Carlos Irrigation District, based on an estimate of sediment deposited since 1966; used since Jan. 1, 1982) 935,000 acre-ft between elevations 2,382.63 ft, sill of lowest outlet gate, and 2,512.3 ft crest of spillway. No dead storage. Figures given herein represent usable contents. Reservoir is used to store water for irrigation of San Carlos project and for power development, dependent on irrigation demands. Spill over Coolidge Dam because of capacity storage has occurred April 22 to May 5, 1979, Feb. 24 to Mar. 13, 1980, Oct. 4-23, 28-31, Dec. 3-13, 1983, Jan. 2 to June 5, 1985.

COOPERATION.--Wire-weight gage readings furnished by U.S. Bureau of Indian Affairs.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,090,000 acre-ft Feb. 26 to Mar. 6, 1980; maximum elevation observed, 2,520.3 ft Feb. 28, 1980; no usable contents at times.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 975,000 acre-ft Mar. 17-20, elevation, 2,514.60 ft; minimum, 651,000 acre-ft Oct. 1, elevation, 2,494.3 ft.

Capacity table (elevation, in feet, and usable contents, in acre-ft)

2,490	592,000	2,505	812,000
2,495	660,000	2,510	895,000
2,500	734,000	2,515	982,000

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	651000	665000	672000	921000	963000	951000	944000	946000	926000	860000	781000	710000
2	654000	665000	674000	925000	963000	951000	946000	946000	925000	857000	778000	707000
3	655000	665000	674000	932000	963000	951000	946000	946000	923000	855000	776000	706000
4	655000	666000	675000	937000	961000	951000	946000	947000	923000	852000	774000	703000
5	655000	666000	675000	939000	960000	951000	947000	947000	923000	850000	771000	701000
6	655000	666000	675000	940000	958000	949000	947000	949000	921000	847000	768000	698000
7	656000	668000	675000	940000	956000	949000	947000	949000	918000	844000	767000	696000
8	656000	668000	676000	942000	954000	949000	946000	949000	916000	840000	765000	694000
9	658000	668000	676000	946000	953000	947000	946000	949000	914000	838000	764000	693000
10	658000	668000	678000	944000	951000	946000	947000	947000	912000	834000	762000	691000
11	659000	669000	679000	944000	951000	944000	947000	947000	911000	830000	760000	688000
12	660000	669000	681000	944000	951000	944000	947000	947000	909000	829000	757000	687000
13	660000	669000	687000	944000	951000	949000	947000	947000	907000	827000	756000	685000
14	660000	669000	691000	942000	951000	958000	947000	946000	905000	824000	752000	684000
15	662000	669000	694000	940000	951000	967000	947000	946000	902000	820000	751000	684000
16	662000	671000	697000	940000	949000	972000	947000	944000	900000	819000	749000	682000
17	660000	671000	700000	940000	947000	975000	947000	944000	897000	815000	746000	681000
18	660000	671000	704000	939000	946000	975000	947000	944000	893000	814000	743000	681000
19	660000	671000	707000	937000	947000	975000	947000	944000	890000	810000	740000	681000
20	660000	671000	712000	937000	949000	975000	947000	942000	888000	809000	738000	684000
21	660000	671000	719000	937000	951000	974000	947000	942000	885000	807000	735000	687000
22	660000	671000	726000	935000	953000	972000	947000	940000	883000	806000	734000	688000
23	660000	671000	732000	935000	956000	970000	947000	940000	880000	804000	732000	688000
24	660000	671000	737000	933000	956000	967000	947000	939000	878000	801000	729000	688000
25	662000	672000	740000	932000	956000	963000	947000	937000	875000	798000	726000	688000
26	662000	672000	745000	930000	954000	961000	947000	935000	873000	795000	724000	688000
27	662000	672000	749000	937000	954000	956000	947000	933000	870000	793000	722000	690000
28	663000	672000	785000	949000	953000	953000	947000	933000	867000	790000	720000	691000
29	663000	672000	847000	956000	---	951000	946000	932000	865000	787000	718000	693000
30	663000	672000	887000	960000	---	947000	946000	930000	862000	785000	715000	694000
31	663000	---	907000	963000	---	944000	---	928000	---	782000	713000	---
MAX	663000	672000	907000	963000	963000	975000	947000	949000	926000	860000	781000	710000
MIN	651000	665000	672000	921000	946000	944000	944000	928000	862000	782000	713000	681000
(*)	2495.2	2495.8	2510.7	2513.9	2513.3	2512.8	2512.9	2511.9	2508.0	2503.1	2498.6	2497.3
(**)	+12000	+9000	+235000	+56000	-10000	-9000	+2000	-18000	-66000	-80000	-69000	-19000

CAL YR 1984 MAX 921000 MIN 651000 ** -14000
WTR YR 1985 MAX 975000 MIN 651000 ** +43000

* Elevation in feet, at end of month.
** Change in contents, in acre-feet.

09469500 GILA RIVER BELOW COOLIDGE DAM, AZ

LOCATION.--Lat 33°10'10", long 110°31'50", in SW¼ sec.17, T.3 S., R.18 E. (unsurveyed), Pinal County, Hydrologic Unit 15050100, on left bank 2,200 ft downstream from Coolidge Dam.

DRAINAGE AREA.--12,886 mi^2.

PERIOD OF RECORD.--July to October 1899, April 1900 to March 1902, July to September 1902, December 1902 to December 1904; January to May 1905 (gage heights only); June to November 1905; August 1910 to February 1911 (gage heights only); April 1914 to current year. Published as "at San Carlos" 1899-1911, as "near San Carlos" 1914-26, and as "at Coolidge Dam" 1927-38.

REVISED RECORDS.--WSP 629: 1915-16. WSP 1049: 1899-1904. WSP 1149: 19M), 1921, 1922(M), 1923, 1924(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 2,309.33 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 5, 1911, nonrecording gage at various sites and datums upstream from mouth of San Carlos River. Apr. 29, 1914, to Mar. 8, 1937, water-stage recorder at various sites within 1 mi upstream from present site at different datums. Mar. 27, 1979 to Oct. 10, 1980, and since Oct. 4, 1983, supplementary water-stage recorder at site on left bank 1,000 ft upstream at datum 2,309.5 ft, NGVD, used above discharges at approximately 1,570 ft^3/s, maximum capacity of parshall flume.

REMARKS.--No estimated daily discharges. Records good except those below 20 ft^3/s and above 1,570 ft^3/s, which are fair. Flow regulated by San Carlos Reservoir since Nov. 15, 1928. (See sta 09469000.) Record includes flow of Warm Springs, which enters between dam and gage. Large diversions above San Carlos Reservoir for irrigation, metallurgical treatment of ore, and municipal supply; about 69,000 acres of land was irrigated, a considerable portion by pumping from ground water.

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--73 years (water years 1901, 1904, 1915-85) 381 ft^3/s, 276,000 acre-ft/yr; median of yearly mean discharges, 230 ft^3/s, 167,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1914-28: Maximum discharge, 130,000 ft^3/s Jan. 20, 1916, estimated on basis of peak discharge near Solomon and at Kelvin; no flow at times.

1928-85: Maximum discharge, 5,020 ft^3/s Oct. 6, 1983, gage height, 10.7 ft, at supplementary gage; no flow at times prior to 1938; minimum daily since 1938, 0.40 ft^3/s in several years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,310 ft^3/s Mar. 18; minimum daily, 11 ft^3/s Nov. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	14	23	1020	2990	2780	1710	1190	824	1170	1210	1070
2	16	15	23	1050	3040	2720	724	957	805	1180	1190	1060
3	16	15	24	1210	3080	2680	760	914	813	1180	1160	1020
4	15	15	24	1330	3010	2680	779	958	790	1180	1150	995
5	15	15	23	1420	2920	2680	783	982	790	1190	1150	954
6	14	15	24	1470	2730	2630	790	1020	847	1200	1150	922
7	13	15	24	1520	2510	2610	798	1010	878	1200	1120	910
8	13	15	25	1580	2310	2490	813	1020	906	1200	1090	867
9	12	15	25	1740	2130	2380	820	1020	918	1190	1090	836
10	12	15	26	1800	2070	2270	836	978	950	1190	1100	768
11	36	15	18	1800	2010	2160	859	962	1030	1190	1100	731
12	50	15	15	1820	1970	2150	886	946	1050	1190	1120	688
13	50	15	15	1760	1950	2150	906	922	1070	1180	1130	550
14	79	16	15	1680	1930	2620	930	902	1080	1180	1130	453
15	100	13	15	1620	2260	3140	954	882	1110	1180	1130	432
16	106	11	15	1580	2380	3580	966	851	1100	1170	1140	429
17	106	122	15	1520	2280	4160	982	813	1100	1170	1140	426
18	88	173	14	1480	2220	4310	978	779	1100	1220	1140	313
19	58	173	14	1440	1670	4280	990	742	1110	977	1140	201
20	35	186	14	1400	1100	4240	1010	760	1110	847	1150	179
21	36	206	14	1360	1180	4110	1000	753	1110	847	1110	179
22	29	190	14	1320	1940	4010	1000	764	1150	1110	1070	181
23	13	179	14	1290	2860	3870	1000	772	1170	1250	1080	134
24	13	152	14	1260	2990	3680	1000	775	1170	1240	1090	102
25	13	148	14	1240	3000	3790	982	820	1170	1240	1100	111
26	13	134	14	1240	2990	3800	954	851	1170	1240	1100	113
27	13	85	14	1360	2900	3520	958	851	1170	1240	1100	74
28	13	76	14	1640	2860	3370	1260	851	1170	1230	1100	57
29	13	43	14	2170	---	3250	1410	867	1170	1230	1100	57
30	13	23	14	2400	---	3040	1390	867	1170	1230	1090	50
31	13	---	395	2790	---	2920	---	851	---	1220	1100	---
TOTAL	1048	2124	926	48310	67280	98070	29228	27630	31001	36261	34770	14862
MEAN	33.8	70.8	29.9	1558	2403	3164	974	891	1033	1170	1122	495
MAX	106	206	395	2790	3080	4310	1710	1190	1170	1250	1210	1070
MIN	12	11	14	1020	1100	2150	724	742	790	847	1070	50
AC-FT	2080	4210	1840	95820	133400	194500	57970	54800	61490	71920	68970	29480

CAL YR 1984 TOTAL 200465 MEAN 548 MAX 1550 MIN 11 AC-FT 397600
WTR YR 1985 TOTAL 391510 MEAN 1073 MAX 4310 MIN 11 AC-FT 776600

09470000 GILA RIVER AT WINKELMAN, AZ

LOCATION.--Lat 33°00'06", long 110°45'55", in NW¼NE¼ sec.13, T.5 S., R.15 E., Gila County, Hydrologic Unit 15050100, on right bank 1 mi north of Winkelman, 2.2 mi upstream from San Pedro River, and 29 mi from Coolidge Dam.

DRAINAGE AREA.--13,268 mi^2, of which 382 mi^2 is below Coolidge Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1917 to June 1918, September 1941 to September 1980, July 1984 to current year.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,921.76 ft above National Geodetic Vertical Datum of 1929. Sept. 10, 1917, to June 27, 1918, nonrecording gage at bridge 1.4 mi downstream at different datum. September 1941 to Jan. 5, 1964, at site about 400 ft upstream at datum 0.81 ft lower. Supplementary nonrecording gage 1.3 mi downstream since Aug. 9, 1963, at datum 13.68 ft lower; supplementary water-stage recorder Jan. 6, 1964, to Nov. 24, 1975, at bridge 1.4 mi downstream at datum 14.76 ft lower.

REMARKS.--Estimated daily dischages: Oct. 1-4, Apr. 3-9, and Sept. 16-30. Records fair except Oct. 1 to Dec. 30, Apr. 2-10 and Sept. 14-30, which are poor. Large diversions above station for irrigation, metallurgical treatment of ore, and municipal supply, but none between Coolidge Dam and this station. About 69,000 acres irrigated in the basin above Coolidge Dam, a considerable portion by pumping from ground water. Flow regulated by San Carlos Reservoir (See sta 09469000).

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--40 years (water years 1942-80, 1985), 316 ft^3/s, 228,900 acre-ft/yr; median of yearly mean discharges, 180 ft^3/s, 130,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,000 ft^3/s of which 500 ft^3/s was released by Coolidge Dam, Aug. 9, 1944, gage height, 18.40 ft, from rating curve extended above 2,900 ft^3/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge during period Oct. 1980 to June 1984, 17,000 ft^3/s, Oct. 2, 1983, gage height 16.0 ft, from flood mark, from rating curve extended above 8,000 ft^3/s, (no significant release from Coolidge Dam).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 13	0830	1,810	7.50	Feb. 25	1145	3,170	9.91
Jan. 8	2130	3,030	9.51	Mar. 20	0030	*4,370	*11.46
Feb. 4	2045	3,300	10.12	Apr. 29	0445	1,390	6.62
Feb. 16	0515	2,830	9.29	July 31	1815	1,350	6.54

Minimum daily discharge, 24 ft^3/s Nov. 12-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	26	68	966	3140	2880	2890	1300	807	1090	1190	1020
2	100	26	56	1140	3180	2770	1570	1050	778	1090	1220	993
3	50	26	49	1270	3150	2730	1100	897	779	1090	1150	985
4	40	25	44	1410	3210	2690	1000	902	791	1090	1130	952
5	38	25	41	1510	3150	2680	990	924	758	1090	1120	942
6	39	25	39	1590	3000	2690	980	947	796	1100	1120	905
7	40	25	37	1640	2880	2620	980	955	834	1100	1110	881
8	41	25	36	2020	2750	2550	980	924	849	1100	1080	879
9	42	25	35	2300	2650	2500	980	929	867	1110	1060	841
10	42	25	35	2040	2560	2420	980	911	869	1100	1060	821
11	42	25	77	2010	2450	2290	992	876	950	1100	1110	767
12	43	24	228	2000	2390	2240	1010	866	964	1100	1070	754
13	47	24	728	2020	2340	2240	1020	848	1000	1100	1080	702
14	52	24	322	1960	2290	2480	1030	836	1000	1100	1080	612
15	61	24	133	1910	2290	3050	1040	821	1040	1100	1080	480
16	87	24	89	1850	2770	3530	1010	800	1050	1110	1080	460
17	119	24	68	1760	2720	3950	1020	771	1050	1120	1080	450
18	133	42	62	1650	2680	4200	1020	749	1040	1120	1070	350
19	125	146	57	1580	2640	4300	1010	727	1040	1130	1080	300
20	108	164	55	1490	1380	4310	1030	707	1050	871	1090	270
21	92	181	56	1420	1290	4260	1030	734	1040	846	1070	240
22	79	196	55	1350	1380	4170	1030	716	1050	873	1020	220
23	70	211	53	1310	2720	4050	1010	736	1100	1150	1010	200
24	61	183	50	1310	3040	3920	1010	735	1100	1160	1020	160
25	53	177	48	1270	3140	3700	996	746	1100	1170	1020	140
26	46	211	46	1400	3120	3930	966	798	1100	1170	1020	130
27	40	140	210	1600	3040	3790	973	805	1090	1170	1020	120
28	36	105	674	1680	3030	3580	1030	815	1090	1180	1020	100
29	32	92	629	2100	---	3420	1370	817	1090	1170	1010	85
30	30	84	308	2810	---	3220	1340	834	1090	1170	1020	75
31	28	---	194	3020	---	3100	---	813	---	1190	1020	---
TOTAL	1856	2354	4582	53386	74380	100260	33387	26289	29162	34060	33310	15834
MEAN	59.9	78.5	148	1722	2656	3234	1113	848	972	1099	1075	528
MAX	133	211	728	3020	3210	4310	2890	1300	1100	1190	1220	1020
MIN	28	24	35	966	1290	2240	966	707	758	846	1010	75
AC-FT	3680	4670	9090	105900	147500	198900	66220	52140	57840	67560	66070	31410

WTR YR 1985 TOTAL 408860 MEAN 1120 MAX 4310 MIN 24 AC-FT 811000

09471000 SAN PEDRO RIVER AT CHARLESTON, AZ

LOCATION.--Lat 31°37'33", long 110°10'26", in NE¼NE¼ sec.11, T.21 S., R.21 E., Cochise County, Hydrologic Unit 15050202, in Spanish land grant of San Juan de las Boquillas y Nogales, at downstream side of pier near center of highway bridge, 0.3 mi south of Charleston, 1.5 mi upstream from Charleston damsite, and 9 mi upstream from Babocomari River.

DRAINAGE AREA.--1,219 mi^2, of which 696 mi^2 is in Mexico.

PERIOD OF RECORD.--January and February 1904 (gage heights only); March 1904 to August 1906; November 1910 to December 1911 (gage heights only); September 1912 to current year. Monthly discharge only October 1926 to May 1928 and December 1933 to April 1935, published in WSP 1313. Published as "near Lewis Springs" 1910-11, and as "near Fairbank" 1911-26.

REVISED RECORDS.--WSP 1119: 1939(M). WSP 1213: 1914, 1916(M), 1918(M), 1919 , 1920(M), 1922-23(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,954.01 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 1, 1942, nonrecording gage or water-stage recorder at various sites within 6.5 mi downstream at different datums.

REMARKS.--Estimated daily discharges: Jan. 4-8, Aug. 4, 5, 17-21, and Sept. 30. Records good except those for periods of estimated daily discharges, which are poor. Diversions above station, mostly by pumping from ground water, for irrigation of 3,200 acres in 1978, excluding an unknown amount in Mexico. Record shows flow available at Charleston damsite.

AVERAGE DISCHARGE.--74 years (water years 1905, 1913-85), 60.0 ft^3/s, 43,470 acre-ft/yr; median of yearly mean discharges, 49 ft^3/s, 35,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 98,000 ft^3/s Sept. 28, 1926, gage height, 21.9 ft, site and datum then in use, by slope-area measurement of peak flow; minimum since 1928, 0.30 ft^3/s July 14-16, 1982, gage height, 1.83 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	1630	*13,000	*8.75	Sept. 29	0200	5,910	7.30
Sept. 28	0900	3,240	6.50				

Minimum discharge, 1.0 ft^3/s July 5, gage height, 1.56 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	20	128	112	68	41	34	5.8	1.8	28	9.0
2	18	18	20	102	95	68	38	29	4.9	1.6	78	8.0
3	319	15	20	90	86	64	36	26	4.9	1.6	25	7.0
4	45	12	24	90	86	64	34	23	4.9	1.4	18	6.7
5	40	12	26	85	90	64	34	20	4.9	1.2	17	6.4
6	31	12	29	85	98	62	32	20	4.9	1.4	25	5.5
7	19	12	28	85	118	58	30	19	4.6	7.2	26	5.5
8	18	11	26	80	115	58	28	18	4.6	38	64	5.2
9	17	11	23	80	102	54	28	17	3.8	17	82	4.9
10	16	10	22	76	95	54	28	17	3.4	9.5	57	4.6
11	16	10	26	74	90	54	28	15	3.2	5.8	44	20
12	15	10	28	70	86	52	24	14	3.2	3.2	99	14
13	15	10	47	70	74	50	23	14	3.2	2.8	139	7.5
14	15	10	148	70	70	48	19	13	3.2	3.9	99	5.8
15	15	10	135	66	70	48	18	13	3.2	176	64	5.5
16	14	10	90	66	70	48	18	13	3.2	114	38	5.2
17	14	10	70	64	70	47	18	12	3.2	41	28	5.8
18	14	10	62	64	66	47	18	12	3.2	97	20	27
19	14	10	62	62	64	47	18	12	3.2	154	18	84
20	14	10	108	58	62	48	18	10	6.3	98	16	21
21	14	10	278	58	62	48	17	10	4.0	60	14	14
22	14	9.0	182	56	70	47	17	10	3.0	38	14	8.0
23	18	17	118	58	80	47	16	10	3.2	34	12	6.7
24	32	18	86	64	80	44	15	8.0	3.0	107	12	6.4
25	22	29	70	80	74	38	14	7.5	2.6	32	10	5.5
26	22	24	64	120	72	38	15	6.7	2.6	29	18	5.5
27	20	22	81	368	70	38	18	6.4	2.6	92	14	4.3
28	20	20	6090	408	68	36	47	6.1	2.6	21	20	840
29	19	20	1400	238	---	36	44	5.8	2.4	45	12	1950
30	19	20	501	164	---	36	38	5.8	2.0	121	11	170
31	18	---	221	130	---	39	---	6.1	---	85	11	---
TOTAL	900	420.0	10105	3309	2295	1550	772	433.4	109.8	1440.4	1133	3269.0
MEAN	29.0	14.0	326	107	82.0	50.0	25.7	14.0	3.66	46.5	36.5	109
MAX	319	29	6090	408	118	68	47	34	6.3	176	139	1950
MIN	13	9.0	20	56	62	36	14	5.8	2.0	1.2	10	4.3
AC-FT	1790	833	20040	6560	4550	3070	1530	860	218	2860	2250	6480

CAL YR 1984 TOTAL 42647.2 MEAN 117 MAX 6090 MIN 1.6 AC-FT 84590
WTR YR 1985 TOTAL 25736.6 MEAN 70.5 MAX 6090 MIN 1.2 AC-FT 51050

09471550 SAN PEDRO RIVER NEAR TOMBSTONE, AZ

LOCATION.--Lat 31°45'03", long 110°12'02", in SE¼ sec.28, T.19 S., R.21 E. (unsurveyed), Cochise County, Hydrologic Unit 15050202, in Spanish land grant of San Juan de las Boquillas y Nogales, on right bank 0.5 mi downstream from Willow Wash, 2.6 mi north of Fairbank, and 8 mi northwest of Tombstone.

DRAINAGE AREA.--1,740 mi^2 approximately, of which 696 mi^2 is in Mexico.

PERIOD OF RECORD.--April 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,780 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 25 to Nov. 9, Jan. 4-10, June 17-23, Aug. 3-7, and 18-22. Records fair except those for periods of estimated daily discharges and those above 100 ft^3/s, which are poor. Diversions above station, mostly by pumping from ground water, for irrigation of 3,200 acres in 1978, excluding an unknown amount in Mexico.

AVERAGE DISCHARGE.--18 years, 55.9 ft^3/s, 40,500 acre-ft/yr; median of yearly mean discharges, 41 ft^3/s, 29,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,200 ft^3/s Oct. 9, 1977, gage height, 11.40 ft, from rating curve extended above 4,900 ft^3/s on basis of slope-area measurements at gage heights 8.89 ft and 11.40 ft. No flow at times during most summers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*), from rating curve extended above 4,900 ft^3/s as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	1815	*10,500	*8.40
Sept. 29	0500	5,080	6.55

No flow June 26 to July 7 and July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	22	29	223	129	91	56	45	7.1	.00	61	3.6
2	11	22	28	154	108	88	55	43	6.0	.00	122	8.4
3	331	22	28	126	96	87	54	39	5.2	.00	85	10
4	91	21	36	93	101	83	53	33	5.0	.00	42	5.2
5	46	21	34	86	122	83	50	33	4.7	.00	35	4.3
6	42	21	34	82	150	82	50	31	4.3	.00	31	3.6
7	35	20	34	80	176	79	48	30	3.8	.00	25	3.0
8	31	20	33	100	169	79	46	28	3.6	3.4	220	1.4
9	30	20	32	120	150	77	49	28	3.3	6.7	76	.36
10	29	20	33	100	134	78	48	27	3.0	4.4	37	.32
11	28	20	38	92	122	70	45	24	2.7	2.6	29	.20
12	26	21	38	87	117	71	42	22	2.4	1.5	40	18
13	26	22	63	89	112	68	41	21	2.1	.62	85	5.5
14	25	22	129	87	108	69	44	19	1.8	.00	80	2.5
15	25	22	189	86	103	72	42	18	1.6	66	38	.49
16	25	23	118	86	99	65	40	21	1.5	196	28	.40
17	25	24	97	81	94	66	37	21	1.7	41	22	.39
18	24	24	94	78	90	65	38	19	1.7	97	17	19
19	24	24	88	74	88	61	35	17	1.7	118	15	42
20	24	24	123	70	85	63	37	16	1.9	118	13	34
21	23	23	398	66	89	60	38	14	2.2	69	12	18
22	23	24	302	64	100	63	37	13	2.1	43	11	11
23	23	29	169	65	109	64	34	13	2.0	36	10	6.4
24	25	32	123	79	110	58	35	12	1.2	47	9.5	4.8
25	25	34	92	111	104	55	36	11	.59	34	11	3.1
26	24	33	77	182	101	54	34	9.8	.00	29	12	2.2
27	24	30	87	733	96	51	39	9.0	.00	110	11	1.9
28	24	29	4420	621	94	47	45	7.7	.00	61	13	449
29	23	29	1780	327	---	51	52	7.0	.00	40	9.2	2050
30	23	29	688	214	---	56	52	7.1	.00	43	6.1	120
31	23	---	340	162	---	54	---	7.5	---	182	4.6	---
TOTAL	1166.1	727	9774	4618	3156	2110	1312	646.1	73.19	1349.22	1210.4	2829.06
MEAN	37.6	24.2	315	149	113	68.1	43.7	20.8	2.44	43.5	39.0	94.3
MAX	331	34	4420	733	176	91	56	45	7.1	196	220	2050
MIN	8.1	20	28	64	85	47	34	7.0	.00	.00	4.6	.20
AC-FT	2310	1440	19390	9160	6260	4190	2600	1280	145	2680	2400	5610

CAL YR 1984 TOTAL 51603.26 MEAN 141 MAX 4420 MIN .00 AC-FT 102400
WTR YR 1985 TOTAL 28971.07 MEAN 79.4 MAX 4420 MIN .00 AC-FT 57480

09472000 SAN PEDRO RIVER NEAR REDINGTON, AZ

LOCATION.--Lat 32°22'50", long 110°26'45", in NE¼NW¼ sec.19, T.12 S., R.19 E., Cochise County, Hydrologic Unit 15050203, on left bank, 0.3 mi upstream from Cochise-Pima County line, 4.3 mi southeast of Redington, and 30 mi north of Benson.

DRAINAGE AREA.--2,939 mi^2, of which 696 mi^2 is in Mexico.

PERIOD OF RECORD.--June 1943 to June 1947, July 1950 to current year (monthly discharge only, July 1954 to March 1955). Also extremes for water years 1948-50, published in WSP 1179.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder, and, since Aug. 26, 1981, crest-stage gage. Datum of gage is 2,930.04 ft above National Geodetic Vertical Datum of 1929. June 1943 to June 1947, and Oct. 1, 1962, to June 27, 1963, at present site at datum 7.49 ft higher. July 1950 to Sept. 30, 1962, at site 400 ft upstream at datum 10.47 ft higher. Supplementary water-stage recorder 50 ft upstream at same datum since June 29, 1977.

REMARKS.--Estimated daily discharges: Jan. 17-25, Apr. 26 and Aug. 1-14. Records poor. Diversions above station for irrigation of about 10,800 acres in 1978, excluding an unknown amount in Mexico. Diversion above gage into formerly used ditch on right bank was placed in operation in January 1972; diversion was observed Dec. 6, Apr. 2 and May 16.

AVERAGE DISCHARGE.--38 years (water years 1944-46, 1951-85), 48.5 ft^3/s, 35,140 acre-ft/yr; median of yearly mean discharges, 30 ft^3/s, 21,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,600 ft^3/s Aug. 2, 1951, gage height, 20.2 ft, present site and datum, from rating curve extended above 16,000 ft^3/s on basis of slope-area measurement of peak flow, maximum gage height 21.60 ft, Oct. 2, 1983; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1906, about 90,000 ft^3/s Sept. 28, 1926, gage height, 29.0 ft, present site and datum, from floodmark, computed on basis of peak discharge of same flood for station at Charleston and for Gila River at Kelvin.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 29	0500	*7,000	*15.40

No flow Nov. 5-24 and May 12 to July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	20	10	564	189	102	43	50	.00	.00	50	3.8
2	12	16	20	453	180	104	46	47	.00	.00	35	3.8
3	72	12	29	319	183	104	51	49	.00	.00	33	3.8
4	262	6.9	33	223	198	100	60	51	.00	.00	50	3.5
5	104	.00	24	166	227	94	67	51	.00	.00	54	4.1
6	62	.00	23	142	230	94	68	54	.00	.00	30	4.4
7	65	.00	26	139	233	98	72	53	.00	.00	20	4.4
8	51	.00	26	134	207	98	82	51	.00	.00	100	4.1
9	41	.00	30	129	198	98	79	50	.00	.00	90	3.8
10	36	.00	32	107	177	96	70	47	.00	.00	30	3.8
11	42	.00	40	98	177	92	68	24	.00	.00	43	3.5
12	29	.00	42	90	166	90	67	.00	.00	.00	34	3.8
13	27	.00	58	75	144	84	68	.00	.00	.00	30	3.5
14	32	.00	88	57	137	77	68	.00	.00	.00	42	3.2
15	32	.00	127	42	129	79	67	.00	.00	11	53	2.9
16	28	.00	134	32	132	82	70	.00	.00	12	36	2.9
17	23	.00	150	27	122	77	67	.00	.00	14	19	4.4
18	20	.00	122	24	118	77	65	.00	.00	31	8.8	11
19	20	.00	111	21	118	77	62	.00	.00	72	6.0	22
20	20	.00	113	19	115	77	63	.00	.00	65	7.3	9.8
21	25	.00	96	17	111	75	65	.00	.00	72	6.8	7.3
22	20	.00	217	16	109	75	63	.00	.00	41	6.0	9.8
23	17	.00	299	15	107	75	59	.00	.00	40	5.6	5.6
24	16	.00	237	14	107	75	42	.00	.00	41	4.8	4.8
25	17	1.1	195	14	107	79	39	.00	.00	41	5.2	4.1
26	24	4.8	168	72	104	79	37	.00	.00	43	13	3.5
27	24	5.2	587	644	92	74	37	.00	.00	78	8.2	3.5
28	24	6.0	1000	507	96	42	37	.00	.00	41	6.0	47
29	26	6.8	3400	383	---	22	44	.00	.00	54	4.8	760
30	25	8.2	1230	258	---	34	47	.00	.00	50	4.4	372
31	24	---	843	217	---	41	---	.00	---	36	4.1	---
TOTAL	1233	87.00	9510	5018	4213	2471	1773	527.00	.00	742.00	840.0	1324.1
MEAN	39.8	2.90	307	162	150	79.7	59.1	17.0	.000	23.9	27.1	44.1
MAX	262	20	3400	644	233	104	82	54	.00	78	100	760
MIN	12	.00	10	14	92	22	37	.00	.00	.00	4.1	2.9
AC-FT	2450	173	18860	9950	8360	4900	3520	1050	.00	1470	1670	2630

CAL YR 1984 TOTAL 39748.00 MEAN 109 MAX 3400 MIN .00 AC-FT 78840
WTR YR 1985 TOTAL 27738.10 MEAN 76.0 MAX 3400 MIN .00 AC-FT 55020

09473000 ARAVAIPA CREEK NEAR MAMMOTH, AZ

LOCATION.--Lat 32°50'37", long 110°37'09", in NW¼NW¼ sec.9, T.7 S., R.17 E., Pinal County, Hydrologic Unit 15050203, on right bank 6 mi upstream from mouth and 9 mi north of Mammoth.

DRAINAGE AREA.--541 mi^2.

PERIOD OF RECORD.--May 1931 to December 1942 (published as "near Feldman"), May 1966 to current year. Monthly discharge only July 1941 to December 1942, published in WSP 1313.

REVISED RECORDS.--WDR AZ-68-1: 1967. WDR AZ-82-1: 1968, 1969, 1973, 1979 (M).

GAGE.--Water-stage recorder and since March 1980, crest-stage gage. Elevation of gage is 2,345 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1981 to Oct. 1, 1983 gage at site 300 ft upstream at datum 4.19 ft higher. Prior to Oct. 1, 1981, at datum 1.00 ft higher. May 1931 to December 1942 at site 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 19-21, Dec. 24-25. Records poor. Diversions for irrigation of several hundred acres above station.

AVERAGE DISCHARGE.--30 years, 35.6 ft^3/s, 25,790 acre-ft/yr; median of yearly mean discharges, 22 ft^3/s, 15,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since at least 1931, 70,800 ft^3/s Oct. 1, 1983, from slope-area measurement of peak flow, gage height, 16.76 ft, from profile past gage; minimum, 0.3 ft^3/s Aug. 30, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 20,000 ft^3/s occurred Aug. 2, 1919, at site of former gaging station 6 mi downstream, operated April 1919 to September 1921, gage height, 6.3 ft, from floodmark, site and datum then in use, from rating curve extended above 5,100 ft^3/s on basis of velocity-area study.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*), from rating curve extended above 130 ft^3/s on the basis of slope area measurement at gage height 16.76 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 12	0015	*1,330	*4.77

Minimum daily discharge, 21 ft^3/s Sept. 1, 23-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	30	55	67	110	70	47	34	31	25	44	21
2	46	29	54	66	83	68	46	35	31	23	56	22
3	58	31	47	64	77	64	46	34	32	23	74	22
4	49	31	48	61	107	60	44	34	33	23	43	22
5	39	29	45	60	148	56	42	34	34	23	31	22
6	34	29	43	59	119	54	40	35	35	24	30	22
7	35	28	42	58	108	49	42	36	35	27	29	23
8	35	27	41	217	117	47	40	36	32	26	29	23
9	34	27	40	88	133	46	40	36	33	24	27	23
10	32	29	41	84	144	44	42	34	32	22	27	22
11	31	28	139	72	113	45	43	33	32	24	90	23
12	32	27	153	81	100	49	44	33	31	29	52	24
13	31	29	425	86	88	46	44	33	31	27	47	23
14	27	30	102	76	73	43	40	33	29	25	42	23
15	27	29	104	62	64	62	39	33	30	27	40	22
16	28	29	77	70	56	67	38	33	30	27	39	24
17	28	32	63	60	60	55	40	33	31	26	41	24
18	31	30	62	58	59	50	39	33	29	27	40	46
19	31	30	58	58	59	49	40	33	29	28	47	32
20	32	30	68	56	51	47	39	33	29	29	110	24
21	34	30	67	56	49	46	38	33	28	27	61	22
22	31	30	64	55	51	47	42	32	27	30	51	22
23	29	42	61	64	72	46	39	32	27	28	44	21
24	30	32	60	226	60	48	38	31	27	26	42	21
25	32	83	60	190	62	47	35	31	27	25	43	21
26	36	115	60	309	60	46	42	31	26	25	57	21
27	35	76	263	202	64	44	42	31	27	25	37	21
28	32	65	360	178	72	43	50	31	26	26	33	49
29	31	59	242	150	---	53	41	31	26	26	24	41
30	32	56	97	207	---	51	36	31	24	26	22	31
31	29	---	79	146	---	49	---	31	---	88	22	---
TOTAL	1052	1172	3120	3286	2359	1591	1238	1023	894	861	1374	757
MEAN	33.9	39.1	101	106	84.2	51.3	41.3	33.0	29.8	27.8	44.3	25.2
MAX	58	115	425	309	148	70	50	36	35	88	110	49
MIN	27	27	40	55	49	43	35	31	24	22	22	21
AC-FT	2090	2320	6190	6520	4680	3160	2460	2030	1770	1710	2730	1500

CAL YR 1984 TOTAL 19505 MEAN 53.3 MAX 425 MIN 22 AC-FT 38690
WTR YR 1985 TOTAL 18727 MEAN 51.3 MAX 425 MIN 21 AC-FT 37140

09473100 SAN PEDRO RIVER BELOW ARAVAIPA CREEK NEAR MAMMOTH, AZ

LOCATION.--Lat 32°51'03", long 110°43'27", in SE¼NE¼SE¼ sec.5, T.7 S., R.16 E., Pinal County, Hydrologic Unit 15050203, at former gaging station, 1.0 mi downstream from mouth of Aravaipa Creek, 10 mi north of Mammoth, and 11 mi upstream from mouth.

DRAINAGE AREA.--4,360 mi^2; of which 696 mi^2 is in Mexico.

PERIOD OF RECORD.--October 1980 to current year.

WATER QUALITY DATA

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 1984 15...	1015	43	1210	8.30	25.0	19.0	450	705	8.2	96	K760	2200
JAN 1985 04...	1515	303	782	8.50	16.0	14.5	700	722	10.1	104	--	--
SEP 09...	1300	12	1180	8.30	--	29.5	11	699	7.4	--	460	2100
30...	1345	440	530	8.04	--	22.0	700	705	7.6	94	--	--

DATE	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT 1984 15...	370	150	110	22	130	3	5.6	270	0	220	350	43
JAN 1985 04...	260	81	77	16	65	2	3.6	217	10	178	190	18
SEP 09...	330	130	100	19	140	4	5.4	248	0	203	360	47
30...	--	--	--		--	--	4.2	107	0	87	130	--

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3) (71851)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)
OCT 1984 15...	2.1	34	836	830	1.1	--	--	1.10	0.11	2.2	0.95	0.03
JAN 1985 04...	1.0	24	502	520	0.68	--	--	1.80	0.40	2.3	2.90	0.09
SEP 09...	2.9	37	856	830	1.2	--	--	0.51	0.05	0.3	0.03	0.03
30...	0.9		346	--	--	0.10	0.44	0.94	0.04	47	40.0	0.04

DATE	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)
OCT 1984 15...	0.03	0.09	20	3	97	<0	<1	<1	<3	2	9
JAN 1985 04...	0.03	0.09	10	3	57	<0.5	<1	1	<3	8	18
SEP 09...	0.01	0.03	20	6	60	0.5	<1	1	<3	5	11
30...	0.02	0.06	--			--		--		--	

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
OCT 1984 15...	5	140	13	<0.1	20	2	<1	<1	1400	7	5
JAN 1985 04...	<1	55	<1	<0.1	10	3	<1	<1	920	6	11
SEP 09...	1	160	8	0.1	30	1	<1	<1	1400	7	15
30...	--			--	--		--	--		--	

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09473100 SAN PEDRO RIVER BELOW ARAVAIPA CREEK NEAR MAMMOTH, AZ--Continued

SUSPENDED-SEDIMENT AND PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)
OCT 1984								
15...	1015	43	63	2010	234	--	--	--
NOV								
14...	0910	32	13	1250	108	--	--	--
DEC								
05...	1145	37	36	966	95	--	--	--
JAN 1985								
04...	1515	303	61	7380	6030	0	2	18
FEB								
28...	0930	260	19	4760	3340	--	--	--
MAR								
13...	1200	143	6	9200	3550	--	--	--
APR								
01...	1300	96	25	425	110	--	--	--
SEP								
09...	1300	12	33	100	3.2	--	--	--
30...	1345	440	96	71700	85200	5	10	20

DATE	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
OCT 1984								
15...	--	--	--	--	--	--	--	--
NOV								
14...	--	--	--	--	--	--	--	--
DEC								
05...	--	--	--	--	--	--	--	--
JAN 1985								
04...	34	55	75	87	93	96	97	100
FEB								
28...	--	--	--	--	--	--	--	--
MAR								
13...	--	--	--	--	--	--	--	--
APR								
01...	--	--	--	--	--	--	--	--
SEP								
09...	--	--	--	--	--	--	--	--
30...	36	60	75	85	92	97	100	100

09474000 GILA RIVER AT KELVIN, AZ

LOCATION.--Lat 33°06'10", long 110°58'33", in NE¼NW¼ sec.12, T.4 S., R.13 E. , Pinal County, Hydrologic Unit 15050100, on left bank at Kelvin, 500 ft downstream from Mineral Creek, 18 mi downstream from San Pedro River, and 19 mi upstream from Ashurst-Hayden Dam.

DRAINAGE AREA.--18,011 mi^2, of which 5,125 mi^2 is below Coolidge Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1911 to current year.

REVISED RECORDS.--WSP 329: 1911. WSP 609: 1916(M). WSP 629: 1914-17. WSP 1119: 1913, 1915, 1917(M), 1921(M), 1922-23, 1927(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,745.02 ft above National Geodetic Vertical Datum of 1929. Prior to June 15, 1914, and Dec. 1, 1914, to Aug. 31, 1915, nonrecording gages at several sites within 2 mi of present site at different datums. Sept. 1, 1915, to Sept. 30, 1963, water-stage recorder at site 900 ft downstream at datum 1.80 ft lower. Since Jan. 16, 1985, supplementary water-stage recorder at same.

REMARKS.--Estimated daily discharges: Oct. 7-15, 20-23, Feb. 25-27. Records fair except for periods of estimated daily record and for period from December to April, which are poor. Large diversions above station for irrigation, of which about 90 percent is above Coolidge Dam. About 82,000 acres irrigated, a considerable portion by pumping from ground water. Flow regulated by San Carlos Reservoir 49 mi upstream since Nov. 15, 1928. (See sta 09469000.) San Pedro River contributes major portion of unregulated inflow.

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--74 years, 505 ft^3/s, 365,900 acre-ft/yr; median of yearly mean discharges, 330 ft^3/s, 239,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1911-28: Maximum discharge, about 132,000 ft^3/s Jan. 20, 1916, gage height, 19.5 ft, site and datum then in use, from rating curve extended above slope-area measurement at gage height, 16.2 ft for flood of Sept. 28, 1926; no flow Feb. 25, 1913.

1929-85: Maximum discharge, 100,000 ft^3/s Oct. 2, 1983, gage height, 33.0 ft from floodmark, from rating curve extended above 12,000 ft^3/s and discharge computed at Hayden Railroad Bridge, minimum daily, 0.1 ft^3/s June 25, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 20	0245	*6,150	*12.11	Mar. 20	1230	5,180	10.54
Jan. 9	0500	4,460	10.63				

Minimum daily discharge, 80 ft^3/s Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	86	118	1560	3440	3210	2640	1240	900	1220	1350	1050
2	130	85	110	1620	3430	3060	1470	1210	872	1220	1320	1020
3	546	87	108	1790	3430	2970	1080	1060	862	1220	1280	1020
4	518	86	114	1600	3460	2920	1040	1040	872	1220	1260	984
5	366	87	120	1640	3470	2900	1030	1050	851	1230	1250	972
6	190	87	116	1670	3450	2890	1010	1060	872	1240	1260	936
7	140	88	108	1680	3420	2820	1010	1070	912	1250	1220	913
8	110	86	109	1930	3400	2780	1010	1060	948	1250	1200	902
9	100	86	108	3290	3380	2720	1020	1060	981	1250	1200	869
10	90	86	107	2460	3350	2820	1030	1050	998	1270	1180	853
11	80	87	228	2300	3150	2840	1030	1020	1030	1260	1190	793
12	95	87	689	2000	2930	2890	1040	1010	1080	1250	1160	779
13	110	86	1730	1980	2750	2870	1050	989	1100	1250	1160	724
14	130	82	1420	1890	2680	2600	1060	979	1120	1250	1130	596
15	140	83	678	1810	2600	2640	1060	960	1130	1250	1120	533
16	160	83	532	1770	2900	2980	1070	943	1130	1440	1110	508
17	179	86	271	1670	2890	3910	1060	917	1150	1320	1110	492
18	181	127	223	1610	2810	4020	1060	900	1200	1320	1100	545
19	170	224	199	1540	2440	4240	1060	875	1170	1340	1090	419
20	160	233	220	1490	1830	4120	1070	846	1140	1100	1100	323
21	145	236	287	1480	1680	4120	1060	862	1140	1060	1090	286
22	135	247	280	1460	1780	3990	1070	842	1150	1070	1060	266
23	120	280	246	1470	2210	4430	1060	858	1190	1320	1040	255
24	105	281	260	1440	2500	3990	1060	851	1200	1350	1060	214
25	97	238	245	1420	2700	4020	1050	855	1200	1330	1070	173
26	92	305	226	1550	2900	3800	1030	884	1200	1340	1080	167
27	94	248	656	2900	3000	4040	1040	896	1210	1330	1080	156
28	90	188	3220	3050	3300	3630	1060	904	1220	1340	1080	146
29	89	150	3760	3010	---	3030	1230	906	1220	1350	1080	143
30	88	125	3420	3370	---	3130	1240	926	1220	1330	1060	418
31	90	---	1720	3450	---	2940	---	919	---	1310	1050	---
TOTAL	4910	4340	21628	61900	81280	103320	33800	30042	32268	39280	35540	17455
MEAN	158	145	698	1997	2903	3333	1127	969	1076	1267	1146	582
MAX	546	305	3760	3450	3470	4430	2640	1240	1220	1440	1350	1050
MIN	80	82	107	1420	1680	2600	1010	842	851	1060	1040	143
AC-FT	9740	8610	42900	122800	161200	204900	67040	59590	64000	77910	70490	34620

CAL YR 1984 TOTAL 278440 MEAN 761 MAX 3760 MIN 80 AC-FT 552300
WTR YR 1985 TOTAL 465763 MEAN 1276 MAX 4430 MIN 80 AC-FT 923800

09474000 GILA RIVER AT KELVIN, AZ--Continued

WATER-QUALITY RECORDS

LOCATION.--Water samples collected at Florence-Kelvin road bridge 200 ft upstream from Mineral Creek, and 700 ft upstream from gaging station.

PERIOD OF RECORD.--December 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1976.
WATER TEMPERATURES: December 1950 to September 1976.
SUSPENDED-SEDIMENT DISCHARGE: January 1958 to September 1976, daily; October 1976 to current year monthly.

REMARKS.--No inflow from Mineral Creek between sampling point and gaging station except during infrequent periods of heavy local rains. Unpublished daily specific conductance measurements for period December 1950 to September 1964 available from district office in Tucson, Ariz.

SUSPENDED SEDIMENT

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1984					
02...	1315	119	24.5	261	84
NOV					
01...	1245	85	17.5	177	41
DEC					
04...	1000	1050	10.0	259	734
JAN 1985					
03...	1415	1560	10.0	5730	24100
31...	1207	3430	7.0	3600	33300
FEB					
28...	1230	3350	12.5	1360	12300
APR					
02...	1540	1180	17.0	1220	3890
MAY					
02...	1300	1240	20.0	180	600
JUN					
04...	1055	836	17.0	147	332
JUL					
02...	0930	1220	17.5	255	840
AUG					
02...	1145	1330	16.0	929	3340
26...	1600	1090	20.0	178	521
SEP					
30...	1800	630	19.0	72900	124000

DIVERSION FROM GILA RIVER

09475500 FLORENCE-CASA GRANDE CANAL, NEAR FLORENCE, AZ

LOCATION.--Lat 33°05'15", long 111°17'10", in NE¼NE¼ sec.14, T.4 S., R.10 E., Pinal County, Hydrologic Unit 15050100, on left bank at China Wash, 2.6 mi downstream from head of Ashurst-Hayden Dam and 7.5 mi northeast of Florence.

PERIOD OF RECORD.--January 1928 to current year (monthly diversions only). Published as a supplement to records for Gila River at Ashurst-Hayden Dam, 1928-80.

GAGE.--Water-stage recorder and Parshall flume. Prior to Jan. 12, 1937, water-stage recorder 900 ft downstream from Ashurst-Hayden Dam.

REMARKS.--Records show monthly diversion from the Gila River at Ashurst-Hayden Dam for irrigation of land under the 100,000 acre San Carlos Project. Diversion records are those at the canal gaging station at the flume 2.6 mi downstream from dam; values are adjusted for sluicing through the dam or from the canal and pumping of water into the canal between the dam and the flume, but are not adjusted for natural losses. Adjusted values show water available at Ashurst-Hayden Dam, except for spill over the dam or water sluiced through the dam during times of flood runoff.

COOPERATION.--Pumping records furnished by Bureau of Indian Affairs.

MONTHLY DIVERSIONS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	Discharge, in cubic feet per second			Diversions in acre-feet	Water sluiced above flume (acre-feet)
	Maximum	Minimum	Mean		
October	391	0	104	6,410	0
November	387	0	88.1	5,240	0
December	848	0	220	13,540	*752
CAL YR 1984	1,400	0	558	403,700	5,850
January	376	0	268	16,480	0
February	671	197	416	23,110	*67
March	1,050	676	903	55,550	*599
April	1,140	772	976	58,100	*627
May	1,120	736	903	55,500	*151
June	1,200	786	1,040	61,790	*97
July	1,260	870	1,140	70,230	*464
August	1,360	1,050	1,140	70,360	*179
September	1,060	151	554	32,950	*220
WTR YR 1985	1,360	0	648	469,300	3,160

* Included in first four columns of table.

09479500 GILA RIVER NEAR LAVEEN, AZ

LOCATION.--Lat 33°15'25", long 112°09'59", in SW¼NW¼ sec.16, T.2 S., R.2 E., Pinal County, Hydrologic Unit 15050100, in Gila River Indian Reservation, on left abutment of highway bridge, 2.1 mi upstream from Santa Cruz River, 2.6 mi south of Komatke, and 7.3 mi south of Laveen.

DRAINAGE AREA.--20,615 mi^2, of which 696 mi^2 is in Mexico.

PERIOD OF RECORD.--January 1940 to September 1946, December 1947 to current year.

GAGE.--Water-stage recorder above concrete diversion dam. Datum of gage is 1,018.90 ft above National Geodetic Vertical Datum of 1929. Since July 9, 1969, supplementary water-stage recorder on overflow channel at highway bridge 0.2 mi south at same datum. Oct. 16, 1940, to July 8, 1969, supplementary staff gage or water-stage recorder on overflow channel at datum 0.23 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Records include flow over dam and in overflow channel. Large diversions above station for irrigation. Most low flow is waste water from irrigated lands and from Chandler, Arizona treatment plant (1979-83). Flow partly regulated by storage in San Carlos Reservoir. (See else where in this report.)

AVERAGE DISCHARGE.--43 years (water years 1941-46, 1949-85), 36.9 ft^3/s, 26,730 acre-ft/yr; median of yearly mean discharges, 13 ft^3/s, 9,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,000 ft^3/s Oct. 4, 1983, gage height, 12.08 ft main gage, 12.34 ft overflow gage, result of flow routing computation; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,080 ft^3/s, Jan. 11, gage height, 7.96 ft main gage and 7.87 ft overflow gage; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	.00	4.6	1050	1600	1270	1050	.00	.00	.00	.00	.00
2	1.9	.00	.80	1040	1930	1240	915	.00	.00	.00	.00	.00
3	.77	.00	4.6	747	1950	1120	753	.00	.00	.00	.00	.00
4	2.4	.00	10	975	1920	1090	79	.00	.00	.00	.00	.00
5	2.0	.00	18	970	1830	1060	48	.00	.00	.00	.00	.00
6	6.0	.00	6.0	892	1820	1000	16	.00	.00	.00	.00	.00
7	3.0	.00	6.1	836	1920	762	11	.00	.00	.00	.00	.00
8	2.0	.00	3.7	857	1850	754	9.5	.00	.00	.00	.00	.00
9	1.0	5.8	5.1	807	1740	738	8.6	.06	.00	.00	.00	.00
10	1.0	8.6	1.8	824	1620	658	7.7	.17	.00	.00	.00	.00
11	1.0	8.6	.71	1580	1550	600	7.1	.00	.00	.00	.00	.00
12	1.0	7.1	7.3	1480	1540	511	7.1	.00	.00	.00	.00	.00
13	1.0	5.8	5.2	1160	1450	459	6.4	.00	.00	.00	.00	.00
14	1.0	4.6	5.2	976	1270	398	5.6	.00	.00	.00	.00	.00
15	.80	1.3	1.8	921	1110	400	4.2	.06	.00	.00	.00	.00
16	.40	5.8	38	851	884	440	2.9	.55	.00	.00	.00	.00
17	.80	7.1	30	741	826	627	1.6	.00	.00	.00	.00	.00
18	.80	3.6	17	577	1060	918	.77	.00	.00	.00	.00	.00
19	.20	4.6	8.3	493	1060	1210	.29	.00	.00	1.1	.00	.00
20	.00	8.6	3.5	438	1040	1400	.05	.00	.00	.00	.00	.00
21	.00	8.6	.64	385	919	1520	.00	.00	.00	.00	.00	.00
22	.00	8.6	.00	343	360	1560	.00	.00	.00	.00	.00	.00
23	.00	10	.00	306	141	1530	.00	.00	.00	.00	.00	.00
24	.00	10	.00	271	296	1530	.00	.00	.00	.00	.00	.00
25	.00	12	.00	247	697	1540	.00	.00	.00	.00	.00	.00
26	.00	12	.00	302	1230	1490	.62	.00	.00	.00	.00	.00
27	.00	5.8	6.2	315	1320	1440	2.7	.00	.00	.00	.00	.00
28	.00	3.6	13	537	1320	1490	1.8	.00	.00	.00	.00	.00
29	.00	3.6	21	993	---	1500	1.0	.00	.00	.00	.00	.00
30	1.9	8.6	263	1300	---	1320	.00	.00	.00	.00	.00	.00
31	.40	---	360	1380	---	1250	---	.00	---	.00	.00	---
TOTAL	31.97	154.30	841.55	24594	36253	32825	2939.93	.84	.00	1.10	.00	.00
MEAN	1.03	5.14	27.1	793	1295	1059	98.0	.027	.000	.035	.000	.000
MAX	6.0	12	360	1580	1950	1560	1050	.55	.00	1.1	.00	.00
MIN	.00	.00	.00	247	141	398	.00	.00	.00	.00	.00	.00
AC-FT	63	306	1670	48780	71910	65110	5830	1.7	.00	2.2	.00	.00

CAL YR 1984 TOTAL 11511.63 MEAN 31.5 MAX 452 MIN .00 AC-FT 22830
WTR YR 1985 TOTAL 97641.69 MEAN 268 MAX 1950 MIN .00 AC-FT 193700

09480000 SANTA CRUZ RIVER NEAR LOCHIEL, AZ

LOCATION.--Lat 31°21'19", long 110°35'20", in SW¼ sec.11, T.24 S., R.17 E. (unsurveyed), Santa Cruz County, Hydrologic Unit 15050301, on southern border of Spanish land grant of San Rafael, near left bank on downstream side of pier of bridge on county road, 1.7 mi upstream from international boundary and 2.5 mi northeast of Lochiel.

DRAINAGE AREA.--82.2 mi^2.

PERIOD OF RECORD.--January 1949 to current year.

REVISED RECORDS.--WSP 1733: 1951.

GAGE.--Water-stage recorder. Elevation of gage is 4,620 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair. Small diversions for irrigation of 200 acres above station, mostly by pumping from ground water.

AVERAGE DISCHARGE.--36 years, 4.19 ft^3/s, 3,040 acre-ft/yr; median of yearly mean discharges, 2.1 ft^3/s, 1,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft^3/s Oct. 9, 1977 and Aug. 15, 1984, gage height, 10.21 ft and 10.2 ft, from rating curve extended above 1,600 ft^3/s on basis of slope-area measurement at gage height 10.21 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	2300	710	4.89
July 19	1930	*850	*5.15

Minimum daily discharge, 1.1 ft^3/s July 1-5, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	6.2	4.3	23	20	13	6.9	3.9	1.7	1.1	2.1	3.4
2	10	6.4	4.3	23	21	13	6.8	3.9	1.7	1.1	3.1	3.1
3	37	6.6	4.3	22	21	12	6.8	3.7	1.7	1.1	6.1	2.8
4	11	6.4	6.9	22	22	12	6.6	3.6	1.8	1.1	6.0	2.6
5	8.5	6.4	4.4	22	24	12	6.4	3.6	1.9	1.1	3.3	2.4
6	8.0	6.3	4.0	20	24	11	6.2	3.5	1.8	1.2	3.4	2.3
7	7.7	6.3	3.9	20	20	11	6.0	3.5	1.8	1.2	8.4	2.0
8	7.5	6.3	3.9	21	19	11	5.8	3.7	1.8	1.1	6.6	1.9
9	7.5	6.2	3.8	20	19	11	5.7	3.6	1.7	1.2	4.6	1.8
10	7.4	6.1	3.9	20	19	11	5.8	3.4	1.6	1.2	4.9	1.7
11	7.3	6.0	6.2	20	18	10	5.6	3.4	1.6	1.2	21	1.8
12	7.3	5.9	4.7	20	18	10	5.5	3.4	1.6	1.2	5.3	1.9
13	7.2	5.8	9.5	20	18	10	5.3	3.2	1.5	1.3	4.8	1.7
14	7.1	5.7	5.1	20	18	9.9	5.2	3.1	1.6	1.4	4.5	1.5
15	7.2	5.6	4.6	20	19	9.8	5.1	2.9	1.6	1.3	4.5	1.5
16	6.9	5.5	4.2	20	19	9.6	4.9	2.7	1.5	1.3	4.6	1.4
17	6.7	5.4	3.9	19	18	9.4	4.7	2.6	1.5	1.3	4.6	1.4
18	6.8	5.3	3.9	19	18	9.3	4.6	2.2	1.4	1.4	4.8	4.2
19	6.6	5.2	4.3	19	18	9.1	4.5	2.1	1.5	47	5.3	2.2
20	6.7	5.1	8.2	18	17	9.0	4.5	2.1	1.5	27	5.4	1.7
21	6.7	5.0	4.9	18	17	8.8	4.5	2.1	1.7	37	8.4	1.5
22	6.7	4.9	4.1	18	16	8.7	4.4	2.1	1.4	11	5.1	1.5
23	6.7	4.8	3.9	19	14	8.4	4.2	2.1	1.3	4.8	5.2	1.4
24	6.9	4.7	3.9	34	14	8.3	4.2	2.1	1.3	2.1	4.9	1.3
25	6.8	4.6	3.9	23	13	8.2	4.0	2.1	1.2	1.8	4.6	1.3
26	7.1	4.5	3.9	96	13	7.9	4.0	2.0	1.2	1.7	7.4	1.3
27	7.1	4.4	105	81	14	7.7	4.8	1.9	1.2	1.9	4.6	1.2
28	7.0	4.3	105	30	13	7.5	4.5	1.9	1.2	2.2	5.0	10
29	7.0	4.2	25	23	---	7.6	4.0	1.9	1.2	2.1	4.3	2.3
30	7.0	4.2	24	20	---	7.3	4.0	1.8	1.2	2.0	4.0	1.5
31	6.8	---	24	20	---	7.2	---	1.8	---	2.1	3.7	---
TOTAL	258.2	164.3	405.9	790	504	300.7	155.5	85.9	45.7	164.5	170.5	66.6
MEAN	8.33	5.48	13.1	25.5	18.0	9.70	5.18	2.77	1.52	5.31	5.50	2.22
MAX	37	6.6	105	96	24	13	6.9	3.9	1.9	47	21	10
MIN	6.6	4.2	3.8	18	13	7.2	4.0	1.8	1.2	1.1	2.1	1.2
AC-FT	512	326	805	1570	1000	596	308	170	91	326	338	132

CAL YR 1984 TOTAL 8732.08 MEAN 23.9 MAX 1230 MIN .00 AC-FT 17310
WTR YR 1985 TOTAL 3111.8 MEAN 8.53 MAX 105 MIN 1.1 AC-FT 6170

09480500 SANTA CRUZ RIVER NEAR NOGALES, AZ

LOCATION.--Lat 31°20'40", long 110°51'03", in NW¼ sec.18, T.24 S., R.15 E. (unsurveyed), Santa Cruz County, Hydrologic Unit 15050301, in Spanish land grant of Maria Santisima del Carmen, on left bank 0.8 mi downstream from international boundary and 5.5 mi east of Nogales.

DRAINAGE AREA.--533 mi^2, of which 348 mi^2 is in Mexico.

PERIOD OF RECORD.--March to November 1907 and April 1909 to December 1912 (discharge measurements and fragmentary gage-height record), January 1913 to June 1922 (October 1915 to September 1916 monthly discharge only), May 1930 to December 1933, July 1935 to current year. Water-year estimates for 1913, 1915-16, 1920-22, 1930, 1934-35, published in WSP 1733.

REVISED RECORDS.--WSP 959: 1935(M). WSP 1213: 1915-16, 1930-32(M), 1934(M), 1936-37(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,702.54 ft above National Geodetic Vertical Datum of 1929 (levels by International Boundary and Water Commission). Prior to June 30, 1922, nonrecording gage or water-stage recorder at various sites 5 to 6 mi downstream at different datums.

REMARKS.--Estimated daily discharges: Dec. 30 to Jan. 6 and Aug. 10, 11, 16-21. Records poor. Diversions above station of about 4,300 acre-ft/yr for irrigation of about 2,150 acres in Mexico in 1977. Diversion 19 mi upstream for municipal supply of city of Nogales, Sonora, began in 1949; diversion in 1968 totaled 3,500 acre-ft/yr.

AVERAGE DISCHARGE.--66 years (water years 1913-22, 1930-85), 28.9 ft^3/s, 20,940 acre-ft/yr; median of yearly mean discharges, 19 ft^3/s, 13,800 acre-ft/yr.

EXTREMES FOR PERIOD 1930-85.--Maximum discharge, 31,000 ft^3/s Oct. 9, 1977, gage height, 15.5 ft, from rating curve extended above 1,660 ft^3/s on basis of slope-area measurement of peak flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	2330	*7,080	*9.14	Feb. 5	2145	2,690	5.00
Jan. 26	2300	4,250	6.25				

Minimum daily discharge, 1.1 ft^3/s July 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	36	29	300	116	110	53	36	5.2	1.2	97	9.7
2	44	36	29	250	101	106	51	33	4.9	1.2	48	6.1
3	76	36	31	200	185	104	50	30	4.7	1.3	44	5.8
4	74	36	45	175	419	102	50	28	4.5	1.3	38	4.9
5	55	36	38	150	1730	101	49	27	4.0	1.3	34	3.7
6	46	36	35	150	1460	102	51	25	4.0	2.0	23	2.6
7	43	36	34	122	1160	99	53	24	3.6	1.8	32	2.6
8	42	36	34	110	856	93	48	23	3.5	1.2	40	2.6
9	42	35	32	110	568	86	46	22	3.2	1.2	20	2.6
10	41	34	33	105	554	84	46	20	2.9	1.2	15	2.6
11	41	34	43	107	343	81	46	19	2.8	1.3	15	3.4
12	42	33	40	119	302	78	46	18	2.6	1.1	35	3.3
13	41	32	320	134	298	75	45	16	2.6	4.9	249	3.7
14	40	30	230	122	233	72	43	15	2.4	7.2	61	2.6
15	41	30	140	126	175	69	44	13	2.2	12	50	2.6
16	40	30	116	121	155	67	43	13	2.1	3.5	35	2.6
17	39	32	109	141	146	66	43	12	2.0	13	25	2.6
18	37	31	103	140	139	65	44	11	1.9	178	20	13
19	37	31	109	135	123	66	42	10	1.9	103	15	11
20	38	31	538	134	113	65	42	9.0	1.9	102	10	5.3
21	38	30	227	125	123	62	43	7.9	1.8	58	7.0	4.5
22	38	30	131	127	248	61	43	7.6	1.7	68	7.5	4.2
23	38	33	150	120	194	58	43	7.4	1.6	82	10	4.2
24	38	32	119	911	129	56	42	7.5	1.6	42	9.2	3.7
25	39	31	95	1000	139	54	41	7.2	1.6	30	7.6	3.0
26	39	31	87	1970	120	52	42	6.9	1.6	27	15	3.0
27	38	30	1810	3050	117	52	45	6.7	1.5	26	15	3.2
28	38	30	3400	1220	113	53	45	6.2	1.4	32	11	31
29	37	30	890	602	---	55	42	5.7	1.4	31	5.3	42
30	37	30	600	269	---	52	38	5.5	1.4	28	5.3	18
31	36	---	400	258	---	52	---	5.2	---	38	27	---
TOTAL	1312	978	9997	12603	10359	2298	1359	477.8	78.5	901.7	1025.9	210.1
MEAN	42.3	32.6	322	407	370	74.1	45.3	15.4	2.62	29.1	33.1	7.00
MAX	76	36	3400	3050	1730	110	53	36	5.2	178	249	42
MIN	36	30	29	105	101	52	38	5.2	1.4	1.1	5.3	2.6
AC-FT	2600	1940	19830	25000	20550	4560	2700	948	156	1790	2030	417

CAL YR 1984 TOTAL 40205.68 MEAN 110 MAX 3400 MIN .00 AC-FT 79750
WTR YR 1985 TOTAL 41600.0 MEAN 114 MAX 3400 MIN 1.1 AC-FT 82510

09482000 SANTA CRUZ RIVER AT CONTINENTAL, AZ

LOCATION.--Lat 31°52'17", long 110°58'46", in SE¼SE¼ sec.11, T.18 S., R.13 E. (unsurveyed), Pima County, Hydrologic Unit 15050301, in Spanish land grant of San Ignacio de la Canoa, on right bank 0.8 mi northeast of Green Valley Post Office, and 1.5 mi north of Continental. Prior to Feb. 13, 1981, at site 1.5 mi upstream.

DRAINAGE AREA.--1,682 mi^2, revised, of which 395 mi^2 is in Mexico.

PERIOD OF RECORD.--May 1940 to December 1946, October 1951 to current year (monthly discharge only for 1985). Low-flow records not equivalent prior to Feb. 13, 1981, due to undetermined amount of underflow between sites.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 2,819.07 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 13, 1981, at site 1.5 mi upstream. July 21, 1940 to Sept. 8, 1965 at datum 17.28 ft higher; Sept. 8, 1965 to present at datum 13.21 ft higher. Old site now used as supplementary gage.

REMARKS.--Estimated daily discharges: Oct. 1, 2, Oct. 6 to Dec. 3, 5-12, 15-17, Feb. 8, Mar. 7-18, and July 22 to Aug. 18. Records poor. Irrigation above station of about 12,500 acres including about 2,300 acres in Mexico, mostly by pumping from ground water.

AVERAGE DISCHARGE.--40 years, 27.4 ft^3/s, 19,850 acre-ft/yr; median of yearly mean discharges, 9.5 ft^3/s, 6,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft^3/s Oct. 2, 1983, gage height, 16.34 ft from rating curve extended above 530 ft^3/s on basis of float-area measurement at gage height 7.75 ft and slope-area measurement of peak flow, maximum gage height 16.70 ft Oct. 9, 1977, site and datum then in use; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	0500	*11,600	a*9.66	July 19	0115	3,090	a7.23
Jan. 27	0645	5,300	a7.99				

a From supplementary gage.

MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	Total	Mean	Runoff in acre-feet
October	197.5	6.37	392
November	1.0	.03	2.0
December	11,341.0	366	22,490
CAL YR 1984	39,363.45	108	78,080
January	7,421	239	14,720
February	5,725	204	11,360
March	470.86	15.2	934
April	2.51	.08	5.0
May	.53	.02	1.1
June	0	0	0
July	1,227	39.6	2,430
August	40.22	1.30	80
September	78.83	2.63	156
WTR YR 1985	26,505.45	72.6	52,570

09486100 CANADA DEL ORO NEAR ORACLE JUNCTION, AZ

LOCATION.--Lat 32°33'54", long 110°50'48", in NE¼SE¼NE¼ sec.13, T.10 S., R.14 E., Pinal County, Hydrologic Unit 15050301, on right bank 1.5 mi upstream from Golden Dam, 5.1 mi east of Oracle Junction and 12 mi upstream from Big Wash.

DRAINAGE AREA.--42.3 mi^2.

PERIOD OF RECORD.--January 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 2,800 ft^3/s Oct. 2, 1983, gage height, 8.09 ft, from crest-stage gage.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 13	0730	96	3.22	Jan. 26	2115	88	3.15
Dec. 27	1645	*488	*5.06	Jan. 30	0245	89	3.16
Jan. 8	2115	112	3.34	Feb. 10	1945	77	3.06

No flow June 14 to July 29, Aug. 9, 10, 18-20, and Aug. 26 to Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.78	1.5	59	37	41	12	5.3	.32	.00	.03	.00
2	1.2	.74	1.6	46	28	38	11	5.3	.27	.00	.10	.00
3	4.8	.72	1.6	37	43	36	10	5.4	.24	.00	.12	.00
4	10	.67	3.2	31	46	33	10	5.3	.23	.00	.10	.00
5	4.2	.63	2.8	28	44	30	11	4.8	.22	.00	.13	.00
6	3.5	.64	2.3	25	47	27	11	4.5	.18	.00	.11	.00
7	2.8	.55	2.1	22	49	25	12	4.2	.17	.00	.07	.00
8	2.4	.55	2.2	49	55	23	13	4.0	.15	.00	.03	.00
9	2.2	.50	2.5	73	62	23	15	3.7	.14	.00	.00	.00
10	1.9	.52	2.7	57	72	27	15	3.4	.10	.00	.00	.00
11	1.8	.50	15	44	68	36	15	3.1	.07	.00	.20	.00
12	1.6	.52	50	37	57	41	14	3.1	.03	.00	.09	.00
13	1.5	.55	66	34	53	38	12	2.9	.01	.00	.09	.00
14	1.4	.52	41	29	52	31	12	2.6	.00	.00	.09	.00
15	1.2	.43	27	27	50	29	12	2.4	.00	.00	.07	.00
16	1.2	.48	19	28	47	25	11	2.1	.00	.00	.04	.00
17	1.2	.46	15	24	43	22	9.7	2.1	.00	.00	.01	.00
18	1.1	.47	15	23	42	20	9.2	1.9	.00	.00	.00	.00
19	1.1	.43	15	22	45	19	8.7	1.8	.00	.00	.00	3.0
20	1.2	.46	36	20	43	18	7.4	1.7	.00	.00	.00	2.3
21	1.5	.42	40	19	48	16	7.3	1.6	.00	.00	.02	1.8
22	1.2	.46	27	18	44	16	7.3	1.4	.00	.00	.07	1.3
23	1.1	3.7	24	20	40	15	6.1	1.3	.00	.00	.07	.81
24	1.1	3.2	21	30	36	14	5.6	1.2	.00	.00	.03	.47
25	1.1	1.7	18	31	32	13	5.1	.97	.00	.00	.01	.30
26	1.0	2.6	16	54	30	13	6.7	.75	.00	.00	.00	.24
27	1.1	1.7	191	77	33	13	6.9	.59	.00	.00	.00	.17
28	1.0	1.5	212	65	43	12	9.2	.45	.00	.00	.00	.40
29	.99	1.6	136	57	---	16	6.4	.35	.00	.00	.00	2.7
30	.93	1.6	96	69	---	13	5.7	.35	.00	.03	.00	1.7
31	.82	---	76	55	---	13	---	.45	---	.01	.00	---
TOTAL	59.44	29.60	1178.5	1210	1289	736	297.3	79.01	2.13	.04	1.48	15.19
MEAN	1.92	.99	38.0	39.0	46.0	23.7	9.91	2.55	.071	.001	.048	.51
MAX	10	3.7	212	77	72	41	15	5.4	.32	.03	.20	3.0
MIN	.82	.42	1.5	18	28	12	5.1	.35	.00	.00	.00	.00
AC-FT	118	59	2340	2400	2560	1460	590	157	4.2	.08	2.9	30

WTR YR 1985 TOTAL 4897.69 MEAN 13.4 MAX 212 MIN .00 AC-FT 9710

09489000 SANTA CRUZ RIVER NEAR LAVEEN, AZ

LOCATION.--Lat 33°13'56", long 112°10'08", in NE¼NE¼ sec.29, T.2 S., R.2 E., Pinal County, Hydrologic Unit 15050303, in Gila River Indian Reservation, on downstream side of highway bridge, 3.4 mi upstream from mouth, 4.3 mi south of Komatke, and 9 mi south of Laveen.

DRAINAGE AREA.--8,581 mi^2.

PERIOD OF RECORD.--January 1940 to September 1946, December 1947 to current year.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,020.86 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-15, Jan. 5-8, 10-14, Mar. 5-22, May 17-19, and Sept. 3, 4. Records poor. Many diversions above station, mostly by pumping from ground water, for municipal uses and for irrigation of about 240,000 acres, not including San Carlos Project. Much of the low flow passing this station is drainage and wasteway return from irrigated lands upstream and pumpage from ground water.

AVERAGE DISCHARGE.--43 years (water years 1941-46, 1949-85), 22.5 ft^3/s, 16,300 acre-ft/yr; median of yearly mean discharges, 12 ft^3/s, 8,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft^3/s Oct. 4, 1983, gage height, 19.74 ft, from flow-routing computation; no flow for most of time in recent years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 380 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 31	1345	*2,030	*14.61
Jan. 30	0200	843	12.35

No flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	.00	4.5	972	194	3.6	2.7	.77	.49	.00	.00	.00
2	1.0	.00	4.1	347	76	3.5	1.9	1.3	.04	.00	.00	.00
3	.00	.00	7.5	113	22	6.3	2.0	.72	.00	.00	.00	.00
4	.00	.00	6.2	15	13	3.5	6.0	.62	.00	.00	.00	.00
5	.00	.00	7.9	7.4	6.0	3.0	1.3	.62	.00	.00	.00	.00
6	.00	.00	13	6.9	4.5	3.0	.69	2.6	.00	.00	.00	.00
7	.00	.00	9.5	5.9	7.5	2.0	.81	1.2	.00	.00	.00	.00
8	.00	.00	7.0	7.4	105	2.0	5.1	.70	.00	.00	.00	.00
9	.00	.00	2.9	8.2	144	1.0	6.2	.60	.00	.00	.00	.00
10	.00	.00	1.9	7.1	71	1.0	1.8	.50	.00	.00	.00	.00
11	.00	.00	17	6.2	19	.00	.75	.41	.00	.00	.00	.00
12	.00	.00	17	6.1	5.8	.00	.36	.33	.00	.00	.00	.00
13	.00	.00	18	5.6	4.9	.00	1.4	.25	.00	.00	.00	.00
14	.00	.00	15	5.6	4.7	.00	.68	.18	.00	.00	.00	.00
15	.00	.00	3.2	13	4.5	.00	.72	.12	.00	.00	.00	.00
16	9.0	.00	65	5.0	4.4	.00	1.2	.09	.00	.00	.00	.00
17	8.3	.00	45	2.2	8.1	.00	2.4	.05	.00	.00	.00	.00
18	1.6	.00	15	1.8	5.0	.00	2.8	.03	.00	.00	.00	6.1
19	2.8	.00	5.9	.90	4.4	.00	1.2	.00	.00	.00	.00	48
20	13	.00	3.7	.72	4.4	.00	.50	.00	.00	.00	.00	27
21	5.3	.00	3.5	.68	5.2	.00	.38	.00	.00	.00	.00	21
22	1.7	.00	3.2	4.1	4.3	.00	.33	.00	.00	.00	.00	20
23	.20	14	2.9	9.6	4.1	.00	.27	.00	.00	.00	.00	18
24	.00	21	34	8.3	4.0	.00	.22	.00	.00	.00	.00	16
25	.00	22	16	2.2	3.9	1.2	7.2	.00	.00	.00	.00	13
26	.00	5.3	4.2	33	3.8	1.3	4.8	.00	.00	.00	.00	11
27	.00	2.1	73	43	3.7	.53	1.9	.00	.00	.00	.00	9.0
28	.00	1.2	59	12	3.7	.31	5.9	.00	.00	.00	.00	7.0
29	.00	1.4	55	359	---	.30	3.8	.00	.00	.00	.00	23
30	.00	1.8	726	681	---	.26	1.4	.00	.00	.00	.00	25
31	.00	---	1780	315	---	1.9	---	.07	---	.00	.00	---
TOTAL	47.90	68.80	3026.1	3004.90	740.9	34.70	66.71	11.16	.53	.00	.00	244.10
MEAN	1.55	2.29	97.6	96.9	26.5	1.12	2.22	.36	.02	.000	.000	8.14
MAX	13	22	1780	972	194	6.3	7.2	2.6	.49	.00	.00	48
MIN	.00	.00	1.9	.68	3.7	.00	.22	.00	.00	.00	.00	.00
AC-FT	95	136	6000	5960	1470	69	132	22	1.1	.00	.00	484

CAL YR 1984 TOTAL 8984.02 MEAN 24.5 MAX 1780 MIN .00 AC-FT 17810
WTR YR 1985 TOTAL 7245.80 MEAN 19.8 MAX 1780 MIN .00 AC-FT 14360

09489500 BLACK RIVER BELOW PUMPING PLANT, NEAR POINT OF PINES, AZ

LOCATION.--Lat 33°28'36", long 109°45'48", in W sec.32, T.2 N., R.25 E. (unsurveyed), Graham County, Hydrologic Unit 15060101, in San Carlos Indian Reservation on left bank 0.9 mi downstream from Phelps Dodge Corp. pumping plant, 1.3 mi downstream from Freezeout Creek, 8 mi northwest of Point of Pines, and 63 mi upstream from confluence with White River.

DRAINAGE AREA.--560 mi^2.

PERIOD OF RECORD.--June 1953 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,725 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Water is diverted at pumping plant 0.9 mi upstream and pumped into headwaters of Willow Creek (tributary of Eagle Creek) for mining, metallurgical treatment of ores, and domestic supply in vicinity of Morenci. (See sta 09445000.)

AVERAGE DISCHARGE (adjusted for diversion to Willow Creek).--32 years, 226 ft^3/s, 163,700 acre-ft/yr; median of yearly mean discharges, 170 ft^3/s, 123,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,900 ft^3/s Oct. 19, 1972, gage height, 18.0 ft, from flood-marks, from rating curve extended above 5,000 ft^3/s; minimum daily, 2.6 ft^3/s July 5, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 4	1630	674	3.79	Jan. 27	0015	848	4.13
Oct. 16	1345	540	3.52	Feb. 13	1930	866	4.14
Dec. 12	0915	598	3.64	Mar. 3	0545	1,420	4.87
Dec. 20	1530	1,180	4.56	Mar. 12	1800	*7,440	*10.58
Dec. 28	0300	6,610	9.93	Apr. 30	0630	1,960	5.43

Minimum daily discharge, 37 ft^3/s July 10.

CORRECTION.--The monthly mean, in ft^3/s, and runoff, in acre-ft, adjusted for Willow Creek Diversion from Black River near Morenci, for the 1984 water year were omitted from the 1984 annual report and are tabulated below:

	MEAN	AC-FT		MEAN	AC-FT
Oct. 1983	865	53,170	Apr. 1984	282	16,810
Nov.	118	7,010	May	127	7,800
Dec.	217	13,330	June	44.0	2,620
CAL YR 1983	548	396,700	July	45.5	2,790
Jan. 1984	278	17,090	Aug.	85.0	5,220
Feb.	191	10,960	Sept.	95.7	5,690
Mar.	339	20,870	WTR YR 1984	226	163,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	211	68	1290	473	1240	1260	1360	194	49	154	59
2	167	191	68	1220	470	1260	1190	1460	179	47	161	56
3	420	182	77	856	483	1300	1370	1390	166	45	137	56
4	641	172	73	530	468	1050	1570	1220	159	43	175	54
5	462	161	78	643	466	932	1760	1070	167	42	175	52
6	340	149	73	592	463	926	1920	947	172	41	153	46
7	273	138	75	539	438	885	1980	839	155	41	134	45
8	227	130	71	520	411	837	1910	754	140	44	143	41
9	197	122	85	511	406	856	1810	696	135	40	178	38
10	176	113	92	461	414	1420	1720	660	131	37	167	38
11	161	105	145	419	400	2520	1700	613	128	38	233	38
12	154	99	514	372	435	5670	1680	557	127	43	235	41
13	175	96	524	376	565	5070	1620	503	126	46	187	48
14	172	88	388	362	540	3650	1540	446	121	43	151	46
15	151	84	312	340	543	2970	1480	423	114	46	127	50
16	378	84	251	312	586	2520	1430	376	109	74	110	58
17	383	84	222	339	654	2200	1310	358	102	63	100	57
18	310	83	216	284	740	1980	1290	344	85	58	92	66
19	291	84	258	280	780	1930	1210	330	78	54	85	94
20	250	82	721	284	851	1710	1050	297	75	79	85	173
21	239	72	565	288	959	1570	956	282	76	91	87	173
22	251	69	374	292	898	1560	944	266	74	80	84	141
23	252	73	298	297	826	1470	880	255	68	91	85	109
24	264	82	251	306	703	1480	760	244	62	94	90	84
25	286	88	226	308	672	1600	703	234	59	75	78	75
26	287	91	216	415	689	1650	710	220	56	67	74	81
27	286	68	1210	784	745	1600	738	211	51	67	74	76
28	281	53	5030	633	1030	1600	959	202	52	81	72	85
29	259	75	2770	583	---	1680	1060	192	52	90	71	136
30	241	82	1950	552	---	1340	1580	185	51	95	72	152
31	226	---	1480	510	---	1280	---	185	---	94	56	---
TOTAL	8332	3211	18681	15608	17108	57756	40090	17119	3264	1898	3825	2268
MEAN	269	107	603	503	611	1863	1336	552	109	61.2	123	75.6
MAX	641	211	5030	1290	1030	5670	1980	1460	194	95	235	173
MIN	132	53	68	280	400	837	703	185	51	37	56	38
AC-FT	16530	6370	37050	30960	33930	114600	79520	33960	6470	3760	7590	4500
(*)	283	117	608	518	624	1880	1350	575	122	75.8	138	93.7
(**)	17400	6960	37390	31880	34630	115400	80560	35330	7280	4660	8470	5570

CAL YR 1984 TOTAL 70274 MEAN 192 MAX 5030 MIN 12 AC-FT 139400 * 209 ** 151600
WTR YR 1985 TOTAL 189160 MEAN 518 MAX 5670 MIN 37 AC-FT 375200 * 532 ** 385500

* Adjusted for Willow Creek diversion from Black River near Morenci.

09490500 BLACK RIVER NEAR FORT APACHE, AZ

LOCATION.--Lat 33°42'46", long 110°12'40", in NW¼ sec.12, T.4 N., R.20 E. (unsurveyed), Gila County, Hydrologic Unit 15060101, on downstream side of first pier from right on highway bridge, 5 mi upstream from confluence with White River and 14 mi west of Fort Apache.

DRAINAGE AREA.--1,232 mi^2.

PERIOD OF RECORD.--October 1912 to December 1915, September 1916, October 1917 to January 1918, April 1918, October 1957 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914-15, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,345 ft (river-profile map). November 1912 to July 1918, nonrecording gages or water-stage recorders at several sites within 1 mi of present site at various datums.

REMARKS.--Estimated daily discharges: May 12-30 and Aug. 8-12. Records good. One transbasin diversion for industrial and municipal use (see record of Willow Creek diversion from Black River, near Morenci). Negligible storage in several small recreational lakes.

AVERAGE DISCHARGE.--31 years (water years 1913-15, 1958-85), 425 ft^3/s, 307,900 acre-ft/yr; median of yearly mean discharges, 360 ft^3/s, 261,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,200 ft^3/s Oct. 2, 1983, gage height, 24.80 ft, from rating curve extended above 8,500 ft^3/s on basis of slope-area measurements at gage heights 22.33 ft and 24.80 ft; minimum daily, 11 ft^3/s July 6, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*), from rating curve extended above 1,500 ft^3/s as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 13	1030	3,470	7.78	Feb. 11	0230	1,380	5.53
Dec. 20	1730	6,110	9.87	Feb. 23	0130	2,740	7.06
Dec. 28	0130	*21,400	*17.66	Mar. 13	0030	13,000	13.98
Jan. 8	2330	3,600	7.92	Apr. 30	1800	2,680	7.01
Jan. 26	2100	3,990	8.27	Aug. 8	unknown	2,770	7.09

Minimum, 54 ft^3/s Sept. 10, 11; gage height, 1.75 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	326	122	1810	678	2010	1570	2150	264	76	168	86
2	264	303	116	1370	574	1880	1480	1950	266	73	188	77
3	504	279	107	1050	551	1830	1600	2020	246	70	242	72
4	877	259	109	874	537	1650	1890	1740	228	67	218	71
5	874	242	110	771	480	1430	2200	1550	232	65	246	73
6	628	225	117	694	433	1280	2420	1380	238	64	250	75
7	483	209	115	628	433	1210	2580	1220	229	65	246	70
8	393	197	115	1360	419	1140	2540	1080	207	64	1100	65
9	329	186	116	1840	487	1080	2400	980	189	66	446	61
10	284	176	139	1010	709	1400	2280	916	181	69	337	57
11	251	165	231	671	1030	2580	2160	843	176	73	272	62
12	238	156	1020	578	847	7200	2160	759	173	60	294	63
13	241	149	2730	575	1090	9540	2090	684	174	64	295	73
14	248	139	1600	512	1140	5490	1990	613	169	67	242	75
15	242	134	950	469	896	4550	1910	546	162	73	194	73
16	253	128	706	428	890	4700	1840	485	155	81	163	70
17	527	127	627	416	970	3480	1720	429	146	97	142	69
18	493	126	793	367	1070	2820	1610	385	139	97	127	84
19	430	128	1110	364	1140	2570	1590	356	129	100	119	93
20	400	124	4180	364	1200	2370	1370	348	113	111	113	182
21	368	124	2570	368	1320	2060	1210	340	109	95	116	265
22	360	113	1140	371	1860	1980	1150	331	107	147	115	277
23	368	112	778	383	2150	1890	1080	324	105	129	109	213
24	373	114	618	399	1550	1830	940	317	101	122	101	168
25	392	139	523	442	1140	1950	820	310	93	136	112	153
26	412	146	471	1710	1010	2100	812	302	88	109	106	122
27	415	136	3520	3130	998	2080	839	294	84	99	95	110
28	417	112	14200	1840	1560	2010	1230	288	81	98	120	153
29	406	105	6120	1120	---	2100	1540	281	76	92	97	490
30	377	110	3840	1050	---	1930	2080	272	77	151	89	243
31	351	---	2420	945	---	1680	---	266	---	152	93	---
TOTAL	12402	4989	51313	27909	27162	81830	51101	23759	4737	2832	6555	3745
MEAN	400	166	1655	900	970	2640	1703	766	158	91.4	211	125
MAX	877	326	14200	3130	2150	9540	2580	2150	266	152	1100	490
MIN	204	105	107	364	419	1080	812	266	76	60	89	57
AC-FT	24600	9900	101800	55360	53880	162300	101400	47130	9400	5620	13000	7430

CAL YR 1984 TOTAL 137188 MEAN 375 MAX 14200 MIN 26 AC-FT 272000
WTR YR 1985 TOTAL 298334 MEAN 817 MAX 14200 MIN 57 AC-FT 591700

09491000 NORTH FORK WHITE RIVER NEAR McNARY, AZ

LOCATION.--Lat 34°02'47", long 109°44'02", in E½ sec.31, T.8 N., R.25 E. (unsurveyed), Apache County, Hydrologic Unit 15060102, in Fort Apache Indian Reservation, on left bank 1.9 mi downstream from Paradise Creek and 7 mi southeast of McNary.

DRAINAGE AREA.--66 mi^2, approximately.

PERIOD OF RECORD.--June 1945 to June 1947, May 1948 to June 1949, May 1950 to September 1954 (monthly discharge only, July to September 1954), June 1957 to September 1985 (discontinued). Maximum discharge only for water years 1955-56, published in WSP 1513. Prior to Oct. 1, 1963, published as White River near McNary.

REVISED RECORDS.--WSP 1243: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,723 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 26 to Dec. 4, Jan. 3, 4, Jan. 10 to Feb. 23, Mar. 16 to Apr. 4, May 27-30, and Aug. 17 to Sept. 4. Records good except for estimated daily discharges, which are poor. No storage above station. Water diverted about 5 mi upstream from station for use at McNary.

AVERAGE DISCHARGE.--33 years (water years 1946, 1951-53, 1958-85), 48.7 ft^3/s, 35,280 acre-ft/yr; median of yearly mean discharges, 46 ft^3/s, 33,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,310 ft^3/s Oct. 2, 1983, gage height, 6.78 ft, from rating curve extended above 470 ft^3/s on basis of slope-area measurement of peak flow; minimum recorded, 4 ft^3/s Nov. 19, 1948, and Nov. 29, 1950, caused by ice jam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 180 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 2	0900	213	2.71	Mar. 12	1200	*754	*4.37
Oct. 15	2000	223	2.75	Apr. 30	2000	385	3.37
Dec. 28	0400	225	2.76				

Minimum daily discharge, 27 ft^3/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	50	40	60	40	51	180	292	246	45	46	35
2	144	49	40	76	40	53	180	283	215	43	45	34
3	138	48	40	70	40	53	180	286	220	40	56	33
4	108	47	43	68	40	60	228	298	228	39	52	33
5	93	46	38	62	40	55	246	320	174	38	50	30
6	82	46	36	63	40	51	286	314	153	38	48	30
7	74	45	36	50	40	51	301	298	153	38	53	29
8	69	44	36	47	40	51	291	304	157	36	60	28
9	64	43	36	46	40	54	296	325	165	36	52	28
10	60	42	41	45	40	89	298	336	163	36	51	27
11	59	42	42	45	40	222	314	317	163	36	48	32
12	63	42	42	40	40	638	317	288	147	37	46	40
13	60	41	41	40	40	438	311	280	140	37	41	30
14	53	41	40	40	40	333	301	291	132	54	40	28
15	118	38	40	40	40	286	304	311	122	48	37	41
16	106	38	40	40	40	280	306	311	114	43	36	41
17	84	40	40	40	40	250	304	278	104	38	35	33
18	86	38	40	40	40	200	325	268	98	59	35	74
19	75	38	40	40	40	250	291	258	95	51	35	99
20	70	39	40	40	40	250	256	253	87	72	50	84
21	70	42	40	40	40	200	235	256	84	64	40	73
22	69	40	40	40	40	180	228	249	78	60	35	64
23	67	40	40	40	40	160	204	270	74	58	35	60
24	68	38	40	40	45	140	181	244	72	47	35	54
25	69	35	40	40	45	100	177	283	66	46	35	51
26	66	35	41	40	45	80	184	288	61	44	45	48
27	62	35	82	40	47	60	184	280	58	42	40	47
28	59	40	166	40	49	60	204	260	54	44	35	99
29	57	40	97	40	---	200	239	250	51	47	35	71
30	54	40	80	40	---	200	304	250	48	41	35	55
31	53	---	73	40	---	190	---	242	---	41	50	---
TOTAL	2357	1242	1530	1432	1151	5285	7655	8783	3722	1398	1336	1431
MEAN	76.0	41.4	49.4	46.2	41.1	170	255	283	124	45.1	43.1	47.7
MAX	144	50	166	76	49	638	325	336	246	72	60	99
MIN	53	35	36	40	40	51	177	242	48	36	35	27
AC-FT	4680	2460	3030	2840	2280	10480	15180	17420	7380	2770	2650	2840

CAL YR 1984 TOTAL 19507 MEAN 53.3 MAX 167 MIN 21 AC-FT 38690
WTR YR 1985 TOTAL 37322 MEAN 102 MAX 638 MIN 27 AC-FT 74030

09492400 EAST FORK WHITE RIVER NEAR FORT APACHE, AZ

LOCATION.--Lat 33°49'20", long 109°48'50", in SE¼ sec.16, T.5 N., R.24 E. (unsurveyed), Apache County, Hydrologic Unit 15060102, in Fort Apache Indian Reservation, on left bank 600 ft downstream from highway bridge, 0.1 mi upstream from Rock Creek and 10 mi east of Fort Apache.

DRAINAGE AREA.--38.8 mi^2.

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,050 ft above National Geodetic Vertical Datum of 1929, by barometer. Prior to Dec. 29, 1960, at site 600 ft upstream at datum 12.78 ft higher. Dec. 29, 1960, to Sept. 28, 1962, at site 600 ft upstream at datum 12.92 ft higher.

REMARKS.--Estimated daily discharges: Jan. 6-9 and June 24 to July 11. Records fair.

AVERAGE DISCHARGE.--28 years, 36.9 ft^3/s, 26,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft^3/s Oct. 1, 1983, gage height, 5.40 ft, from rating curve extended above 1,000 ft^3/s; minimum daily, 4.0 ft^3/s Nov. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1730	105	1.94	Apr. 16	0500	197	2.34
Dec. 27	2000	429	3.06	May 5	0300	177	2.25
Mar. 12	1300	*481	*3.18				

Minimum daily, 18 ft^3/s July 9, 10, 13, and Sept. 6-10, 14, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	39	23	61	25	55	85	147	105	23	23	19
2	62	38	22	53	36	56	88	153	104	21	23	20
3	84	37	22	47	41	56	98	156	100	20	27	20
4	95	36	23	45	27	51	114	160	92	20	40	19
5	86	35	23	43	24	48	125	168	81	20	37	19
6	75	34	23	40	24	46	129	158	70	19	31	18
7	65	33	23	38	24	44	138	152	71	19	31	18
8	58	32	24	35	24	43	146	144	83	19	31	18
9	52	31	24	32	25	43	139	160	91	18	29	18
10	47	30	23	32	26	53	142	167	91	18	28	18
11	44	29	35	31	26	91	156	154	86	19	27	20
12	45	28	38	31	26	401	166	135	80	19	27	24
13	42	27	34	30	27	252	170	120	72	18	25	19
14	39	26	32	29	30	157	177	111	65	23	24	18
15	49	26	30	28	31	129	184	109	60	22	23	20
16	63	26	30	28	35	117	186	111	55	20	22	19
17	58	26	29	28	40	102	173	110	51	22	21	18
18	56	25	29	28	45	98	174	115	47	24	22	32
19	52	25	29	27	44	94	153	121	44	19	23	53
20	50	22	38	27	47	92	134	124	41	25	22	61
21	49	24	32	28	46	87	127	120	38	27	21	50
22	46	25	26	28	45	85	123	111	35	28	20	39
23	44	25	28	29	42	84	109	106	33	27	20	33
24	44	25	27	29	39	87	103	105	31	23	21	29
25	42	25	27	28	38	92	100	109	30	23	28	27
26	42	21	28	37	40	95	104	124	28	24	25	25
27	43	23	163	35	43	95	80	129	27	23	21	23
28	43	26	197	31	56	95	81	123	26	23	20	44
29	42	26	111	30	---	100	87	116	25	25	20	40
30	41	25	84	29	---	93	112	108	24	23	20	33
31	40	---	70	29	---	87	---	105	---	21	20	---
TOTAL	1642	850	1347	1046	976	3028	3903	4031	1786	675	772	814
MEAN	53.0	28.3	43.4	33.7	34.9	97.7	130	130	59.5	21.8	24.9	27.1
MAX	95	39	197	61	56	401	186	168	105	28	40	61
MIN	39	21	22	27	24	43	80	105	24	18	20	18
AC-FT	3260	1690	2670	2070	1940	6010	7740	8000	3540	1340	1530	1610

CAL YR 1984 TOTAL 12613.1 MEAN 34.5 MAX 197 MIN 5.6 AC-FT 25010
WTR YR 1985 TOTAL 20870 MEAN 57.2 MAX 401 MIN 18 AC-FT 41390

09494000 WHITE RIVER NEAR FORT APACHE, AZ

LOCATION.--Lat 33°44'11", long 110°09'58", in SE¼ sec.32, T.4 N., R.21 E. (unsurveyed), Gila County, Hydrologic Unit 15060102, in Fort Apache Indian Reservation, on right bank 2,200 ft downstream from highway bridge, 4.5 mi upstream from confluence with Black River, and 11 mi west of Fort Apache.

DRAINAGE AREA.--632 mi^2.

PERIOD OF RECORD.--October 1917 to September 1918 (published as "at Wanslee's Ranch"), October 1957 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WRD Ariz. 1971: 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 4,365.99 ft above National Geodetic Vertical Datum of 1929. Oct. 12, 1917, to Aug. 31, 1918, nonrecording gage at site 2,100 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 4-21, Jan. 16-22, Feb. 1-12, June 18 to July 2, and Aug. 11, 12. Records good except those for the periods of estimated record, which are fair. Small diversions above station for irrigation of about 1,460 acres. Negligible storage above station in several small recreational lakes.

AVERAGE DISCHARGE.--29 years, 209 ft^3/s, 151,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,600 ft^3/s Dec. 18, 1978, gage height, 15.71 ft, from rating curve extended above 7,800 ft^3/s on basis of slope-area measurement of peak flow; no flow July 18-21, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 2	0900	4,160	8.57	Mar. 12	1530	*8,900	*12.23
Dec. 27	2230	6,710	10.70	May 2	2330	1,730	5.80
Jan. 26	1600	1,570	5.56	July 17	2330	1,080	4.75

Minimum daily, 53 ft^3/s, Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	254	138	625	257	619	886	1270	482	84	105	79
2	1850	244	132	487	229	621	877	1320	455	75	140	77
3	1520	240	130	429	251	634	929	1180	422	69	122	78
4	1100	236	138	389	246	546	1020	1120	406	66	135	71
5	727	229	136	367	230	510	1100	1110	396	63	158	63
6	571	225	131	342	234	512	1200	1060	338	63	129	61
7	471	221	131	334	230	475	1270	1000	311	71	120	61
8	399	216	133	379	229	622	1280	947	319	72	144	59
9	352	210	146	357	242	440	1250	965	332	65	137	58
10	315	206	144	304	250	797	1260	977	332	63	118	53
11	286	200	254	275	235	1030	1260	931	318	63	117	66
12	288	196	497	295	230	5130	1270	848	300	69	111	82
13	310	189	553	268	286	3220	1260	770	282	65	103	84
14	267	185	536	256	334	2130	1230	696	263	74	97	68
15	261	179	309	245	333	1790	1210	652	247	97	88	71
16	621	175	254	243	357	1480	1190	636	241	89	85	194
17	480	169	250	230	388	1240	1130	605	238	91	81	111
18	443	166	278	231	413	1310	1160	603	251	235	81	116
19	404	162	287	225	408	1130	1110	603	234	154	82	260
20	368	156	501	223	432	1020	969	602	217	131	88	443
21	362	149	397	225	456	974	885	586	189	185	89	277
22	349	142	277	225	464	945	883	562	177	152	81	204
23	340	147	262	227	441	905	813	521	147	154	78	171
24	338	156	244	243	373	929	714	510	132	128	82	152
25	344	162	234	247	378	1000	670	510	121	110	93	137
26	332	151	228	687	390	1050	700	541	120	107	99	128
27	335	127	1690	638	406	1030	713	561	111	100	93	118
28	318	137	3130	390	532	1010	870	547	102	103	87	185
29	297	154	1520	327	---	1040	992	523	97	107	78	313
30	279	147	981	313	---	926	1270	500	88	103	75	212
31	266	---	747	283	---	853	---	507	---	99	77	---
TOTAL	14808	5530	14788	10309	9254	35918	31371	23763	7668	3107	3173	4052
MEAN	478	184	477	333	331	1159	1046	767	256	100	102	135
MAX	1850	254	3130	687	532	5130	1280	1320	482	235	158	443
MIN	215	127	130	223	229	440	670	500	88	63	75	53
AC-FT	29370	10970	29330	20450	18360	71240	62220	47130	15210	6160	6290	8040

CAL YR 1984 TOTAL 88021 MEAN 240 MAX 3130 MIN 32 AC-FT 174600
WTR YR 1985 TOTAL 163741 MEAN 449 MAX 5130 MIN 53 AC-FT 324800

09495000 FORESTDALE CREEK DIVERSION FROM SHOW LOW CREEK, NEAR SHOW LOW, AZ

LOCATION.--Lat 34°10'40", long 110°00'56", in SE¼NW¼ sec.16, T.9 N., R.22 E., Navajo County, Hydrologic Unit 15020005, in Sitgreaves National Forest, on right bank 170 ft downstream from terminal structure of Show Low Creek diversion works, 4,350 ft west of pumping plant on Show Low Lake, and 5 mi south of Show Low.

PERIOD OF RECORD.--May 1953 to current year.

GAGE.--Water-stage recorders and V-notch sharp-crested weir. Datum of gage is 6,621.57 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark).

REMARKS.--Records good. Entire flow consists of water pumped from Show Low Lake, in Little Colorado River basin, into headwaters of Forestdale Creek in Gila River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 28 ft^3/s June 2, 3, 5, 1973, Mar. 17-25, 27-30, Apr. 2-15, Apr. 18 to May 5, 1975; no flow for most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	14	14	.00	.00	.00	.00	.00	23	15	14	13
2	.00	14	14	.00	.00	.00	.00	.00	22	15	14	13
3	.00	14	14	.00	.00	.00	.00	.00	22	15	14	13
4	.00	14	14	.00	.00	.00	.00	.00	22	15	14	13
5	.00	14	13	.00	.00	.00	.00	.00	18	15	14	13
6	.00	14	14	.00	.00	.00	.00	.00	18	15	14	13
7	.00	14	14	.00	.00	.00	.00	.00	22	15	14	13
8	.00	14	14	.00	.00	.00	.00	.00	22	15	14	13
9	.00	14	14	.00	.00	.00	.00	.00	22	15	14	13
10	.00	14	14	.00	.00	.00	.00	.00	22	15	14	13
11	.00	14	14	.00	.00	.00	.00	.00	18	15	14	13
12	.00	14	14	.00	.00	.00	.00	.00	15	15	14	13
13	.00	14	14	.00	.00	.00	.00	.00	15	14	14	13
14	.00	14	14	.00	.00	.00	.00	.00	15	15	14	13
15	.00	14	14	.00	.00	.00	.00	.00	15	14	14	13
16	.00	14	14	.00	.00	.00	.00	.00	15	14	14	13
17	.00	14	14	.00	.00	.00	.00	.00	15	14	14	13
18	7.2	14	14	.00	.00	.00	.00	.00	15	14	14	13
19	14	14	8.8	.00	.00	.00	.00	.00	15	14	14	13
20	14	14	.00	.00	.00	.00	.00	.00	15	14	14	13
21	14	14	.00	.00	.00	.00	.00	.00	15	14	14	13
22	14	14	.00	.00	.00	.00	.00	.00	15	14	14	13
23	14	14	.00	.00	.00	.00	.00	.00	15	14	14	13
24	14	14	.00	.00	.00	.00	.00	.00	15	14	14	13
25	14	14	.00	.00	.00	.00	.00	.00	15	14	14	13
26	14	14	.00	.00	.00	.00	.00	.00	15	14	13	13
27	14	14	.00	.00	.00	.00	.00	.00	15	14	13	13
28	14	14	.00	.00	.00	.00	.00	.00	15	14	13	13
29	14	14	.00	.00	---	.00	.00	.00	15	14	13	13
30	14	14	.00	.00	---	.00	.00	.00	15	14	13	13
31	14	---	.00	.00	---	.00	---	14	---	14	13	---
TOTAL	189.20	420	259.80	.00	.00	.00	.00	14.00	516	447	428	390
MEAN	6.10	14.0	8.38	.000	.000	.000	.000	.45	17.2	14.4	13.8	13.0
MAX	14	14	14	.00	.00	.00	.00	14	23	15	14	13
MIN	.00	14	.00	.00	.00	.00	.00	.00	15	14	13	13
AC-FT	375	833	515	.00	.00	.00	.00	28	1020	887	849	774

CAL YR 1984 TOTAL 3230.70 MEAN 8.83 MAX 16 MIN .00 AC-FT 6410
WTR YR 1985 TOTAL 2664.00 MEAN 7.30 MAX 23 MIN .00 AC-FT 5280

09496500 CARRIZO CREEK NEAR SHOW LOW, AZ

LOCATION.--Lat 33°59'09", long 110°16'52", in sec.24, T.7 N., R.19 E. (unsurveyed), Gila County, Hydrologic Unit 15060104, in Fort Apache Indian Reservation, on right bank 500 ft upstream from bridge on U.S. Highway 60, 1 mi downstream from Corduroy Creek, 23 mi southwest of Show Low, and 24 mi upstream from mouth. Prior to June 1976 at site on bridge pier 400 ft downstream.

DRAINAGE AREA.--439 mi^2.

PERIOD OF RECORD.--June 1951 to June 1961, June 1967 to June 1976, October 1975 to June 1976 (monthly discharges only), April 1977 to current year.

REVISED RECORDS.--WRD Ariz. 1968: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,749.52 ft above National Geodetic Vertical Datum of 1929. Prior to June 1976 at site on bridge pier 400 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 2-21 when there was no gage-height record, and portions of the following days affected by backwater from ice, Nov. 28, Dec. 2, 22-24, Jan. 17, and Feb. 1-2. Records good. Diversions for irrigation above station of less than 300 acres. Records include trans basin diversion from Show Low Creek. (See sta 09495000.)

AVERAGE DISCHARGE.--25 years (water years 1952-60, 1968-75, 1978-85), 56.5 ft^3/s, 40,930 acre-ft/yr; median of yearly mean discharges, 31 ft^3/s, 22,500 acre-ft/yr, unadjusted for transbasin diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,500 ft^3/s Jan. 18, 1952, gage height, 12.08 ft, at site then in use, from rating curve extended above 2,000 ft^3/s on basis of slope-area measurement of peak flow, maximum gage height, 15.1 ft Dec. 18, 1978, from high-water mark; minimum daily discharge, 0.2 ft^3/s July 12, 1951, Sept. 21, 1959, at site then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1951, about 23,000 ft^3/s Dec. 30, 1965, gage height, 13.0 ft, from floodmark at site then in use, from rating curve extended above 2,000 ft^3/s on basis of slope-area measurement at gage height 12.08 ft at site then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*), from rating curve extended above 4,400 ft^3/s on basis of slope-area measurement at gage height 12.07 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1715	1,010	4.12	Jan. 26	1300	2,960	6.18
Dec. 20	1300	1,210	4.37	Mar. 12	1130	2,890	6.11
Dec. 27	1830	*12,800	*12.14				

Minimum daily, 11.0 ft^3/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	24	27	230	244	396	106	92	21	17	40	21
2	71	24	27	153	225	273	101	64	33	17	30	18
3	431	24	27	114	147	235	90	59	34	17	26	18
4	318	24	30	94	134	192	73	48	35	16	24	18
5	91	24	29	82	111	176	62	40	36	16	23	17
6	46	24	25	75	112	151	54	35	30	17	21	17
7	29	24	26	71	104	129	49	31	30	17	20	19
8	22	24	28	120	131	112	45	29	33	17	26	18
9	18	24	29	150	177	103	42	26	32	17	22	17
10	15	24	28	104	227	102	42	25	31	17	20	17
11	14	24	47	82	196	137	40	24	30	17	20	24
12	21	24	194	82	167	1720	38	23	26	17	20	24
13	15	24	260	70	206	649	35	23	24	17	19	19
14	13	24	179	62	244	331	34	23	23	17	19	18
15	46	24	132	60	237	365	32	23	22	19	18	22
16	75	24	105	58	256	523	31	22	22	20	17	19
17	47	24	92	49	293	429	30	21	21	18	17	18
18	31	25	109	47	304	607	33	22	20	30	18	73
19	33	25	174	46	279	244	37	21	19	26	17	66
20	34	24	735	44	283	226	33	20	19	41	19	35
21	32	24	444	41	281	207	33	19	19	22	20	24
22	33	24	209	41	304	168	42	20	19	28	18	24
23	29	33	138	45	281	130	35	19	19	26	18	22
24	29	32	105	73	252	110	31	18	18	26	17	20
25	31	48	89	88	276	96	29	18	18	23	18	19
26	30	36	77	1260	332	84	38	16	18	20	17	18
27	29	29	3560	967	302	74	46	16	18	21	22	18
28	27	30	2680	515	438	69	134	15	18	23	22	44
29	27	31	1250	369	---	94	304	16	17	23	19	30
30	26	28	561	314	---	103	182	16	17	26	20	24
31	26	---	333	244	---	94	---	17	---	23	19	---
TOTAL	1700	797	11749	5750	6543	8329	1881	861	722	651	646	741
MEAN	54.8	26.6	379	185	234	269	62.7	27.8	24.1	21.0	20.8	24.7
MAX	431	48	3560	1260	438	1720	304	92	36	41	40	73
MIN	11	24	25	41	104	69	29	15	17	16	17	17
AC-FT	3370	1580	23300	11410	12980	16520	3730	1710	1430	1290	1280	1470

CAL YR	1984	TOTAL	19962.8	MEAN	54.5	MAX	3560	MIN	4.5	AC-FT	39600
WTR YR	1985	TOTAL	40370	MEAN	111	MAX	3560	MIN	11	AC-FT	80070

09497500 SALT RIVER NEAR CHRYSOTILE, AZ

LOCATION.--Lat 33°47'53", long 110°29'57", in sec.25, T.5 N., R.17 E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in San Carlos Indian Reservation, on left bank 1,200 ft upstream from bridge on U.S. Highway 60, 5.7 mi northeast of Chrysotile, 8 mi upstream from Cibecue Creek, and 33 mi downstream from confluence of Black and White Rivers.

DRAINAGE AREA.--2,849 mi^2.

PERIOD OF RECORD.--September 1924 to current year (monthly discharge only July to December 1954).

REVISED RECORDS.--WSP 859: 1926-27, 1929-30, 1934, 1936. WSP 899: 1927, 1932, 1937, 1938(M). WSP 1313: 1925-26(M), 1929-30(M), 1935-36(M), 1944(M). WSP 1343: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,354.57 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 23 to Nov. 1, June 4-20. Records good. Several diversions for irrigation above station of about 3,100 acres, one diversion into the basin (see record of Forestdale Creek diversion from Show Low Creek, near Show Low), and one diversion out of the basin (see record of Willow Creek diversion from Black River, near Morenci).

AVERAGE DISCHARGE.--61 years, 659 ft^3/s, 477,400 acre-ft/yr; median of yearly mean discharges, 545 ft^3/s, 395,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,400 ft^3/s Dec. 18, 1978, gage height, 17.35 ft, from rating curve extended above 52,000 ft^3/s; minimum, 49 ft^3/s July 6, 7, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood peak of 74,000 ft^3/s occurred prior to 1924 and is believed to be the peak of the flood of Jan. 19, 1916, gage height, 18 ft, from floodmarks, from rating curve extended above 52,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 2	1500	4,540	5.59	Feb. 23	0630	3,940	5.28
Dec. 13	1245	5,230	5.92	Mar. 12	2000	21,000	10.47
Dec. 20	2245	8,060	7.06	Apr. 7	2215	4,240	5.44
Dec. 28	0645	*34,600	*12.88	Apr. 30	2315	4,320	5.48
Jan. 26	2200	10,900	7.99				

Minimum, 176 ft^3/s Sept. 11; gage height, 1.71 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	608	351	3180	1370	3250	2650	3980	842	260	384	230
2	1700	568	355	2440	1030	3030	2580	3610	833	253	397	227
3	2860	538	335	1840	965	2880	2600	3740	827	246	486	221
4	2500	511	350	1570	1010	2700	3000	3290	770	234	459	211
5	1830	490	356	1390	942	2280	3390	3020	730	224	444	203
6	1320	464	350	1270	844	2050	3750	2790	700	220	446	198
7	1020	443	354	1170	822	1960	4050	2530	680	215	404	198
8	835	424	356	1510	814	1830	4100	2300	660	226	750	192
9	708	411	365	3610	950	1710	3950	2160	630	220	543	186
10	621	398	388	1850	1240	1920	3820	2110	620	213	415	179
11	555	385	636	1270	1700	3420	3660	2030	590	216	397	181
12	524	376	1530	1060	1370	11700	3690	1850	560	213	389	213
13	541	363	4300	1040	1540	15400	3630	1670	540	209	482	221
14	521	352	3020	945	1790	9410	3510	1510	520	212	420	217
15	531	347	1790	869	1590	7530	3390	1380	500	228	361	204
16	730	339	1350	805	1560	8310	3310	1310	480	261	320	277
17	947	335	1160	767	1680	5950	3180	1250	460	250	294	287
18	982	336	1360	700	1830	4660	3020	1200	440	335	276	267
19	860	339	1810	688	1910	4190	3000	1190	420	405	269	463
20	785	342	4540	684	1960	3900	2660	1170	390	482	266	752
21	736	341	4840	678	2110	3440	2350	1140	374	404	272	676
22	724	337	2000	678	2570	3240	2240	1080	360	384	269	583
23	740	356	1360	690	3410	3100	2130	1030	357	409	258	493
24	780	383	1090	723	2630	2960	1910	983	347	361	250	405
25	750	588	933	790	1940	3090	1690	953	332	333	244	354
26	760	529	847	3300	1820	3310	1660	957	318	317	281	320
27	730	404	5730	6900	1790	3320	1750	973	304	291	263	299
28	705	353	24700	3870	2270	3210	2120	956	296	280	277	330
29	675	351	11900	2240	---	3290	2900	908	286	290	268	939
30	650	361	7140	1930	---	3230	3600	859	270	309	242	636
31	620	---	4340	1760	---	2800	---	855	---	321	232	---
TOTAL	28698	12372	89936	52217	45457	133070	89290	54784	15436	8821	11058	10161
MEAN	926	412	2901	1684	1623	4293	2976	1767	515	285	357	339
MAX	2860	608	24700	6900	3410	15400	4100	3980	842	482	750	939
MIN	458	335	335	678	814	1710	1660	855	270	209	232	179
AC-FT	56920	24540	178400	103600	90160	263900	177100	108700	30620	17500	21930	20160

CAL YR 1984 TOTAL 273686 MEAN 748 MAX 24700 MIN 129 AC-FT 542800
WTR YR 1985 TOTAL 551301 MEAN 1510 MAX 24700 MIN 179 AC-FT 1094000

09497800 CIBECUE CREEK NEAR CHRYSOTILE, AZ

LOCATION.--Lat 33°50'35", long 110°33'25", in E sec.8, T.5 N., R.17 E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in Fort Apache Indian Reservation, on right bank 0.5 mi upstream from mouth and 7 mi north of Chrysotile.

DRAINAGE AREA.--295 mi^2.

PERIOD OF RECORD.--May 1959 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,200 ft above National Geodetic Vertical of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-3, Dec. 27 to Jan. 10, and Mar. 12, 13. Records good. Small diversions for irrigation in the vicinity of the village of Cibecue.

AVERAGE DISCHARGE.--26 years, 47.7 ft^3/s, 34,560 acre-ft/yr; median of yearly mean discharges, 34 ft^3/s, 24,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,200 ft^3/s Sept. 2, 1977, gage height, 17.3 ft, on basis of slope-area measurement of peak flow; minimum daily, 4.1 ft^3/s Aug. 17-19, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*), from rating curve extended above 1,900 ft^3/s on basis of slope-area measurement at gage height 17.3 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	unknown	3,300	6.34	Mar. 12	unknown	2,860	5.98
Dec. 13	0200	1,080	4.27	Aug. 27	2100	1,660	4.90
Dec. 27	unknown	*6,190	*8.32	Sept. 18	1730	1,830	5.07
Jan. 26	1530	1,480	4.72				

Minimum daily discharge, 18 ft^3/s July 3-6, 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	27	26	140	128	152	139	70	31	19	50	32
2	19	27	27	130	104	158	138	69	31	19	38	27
3	640	27	27	125	110	161	131	66	29	18	53	26
4	201	27	29	120	104	155	122	61	31	18	57	26
5	97	27	29	110	95	141	111	58	31	18	32	25
6	76	27	28	105	93	128	104	57	29	18	28	25
7	67	27	28	100	89	115	101	55	28	20	26	30
8	50	26	29	95	101	106	97	53	26	19	60	26
9	46	26	30	90	125	101	94	51	26	19	36	25
10	43	26	31	83	155	97	92	49	25	18	28	25
11	40	28	66	72	118	113	87	48	24	18	27	33
12	49	27	77	67	101	880	81	48	24	18	28	40
13	38	27	507	63	101	450	76	47	24	18	28	28
14	35	26	152	60	110	240	73	45	23	21	27	26
15	118	27	110	57	120	464	70	45	23	21	25	26
16	61	26	95	54	130	398	67	43	23	22	24	25
17	36	27	89	51	146	330	65	42	23	22	25	24
18	35	28	95	50	170	312	70	43	23	20	25	581
19	32	27	83	48	177	289	66	41	22	20	25	115
20	34	26	279	48	180	250	62	40	21	31	26	53
21	37	27	149	48	190	231	64	39	21	24	27	45
22	42	27	95	48	207	209	67	38	21	24	26	39
23	32	38	83	48	221	184	60	37	21	25	25	37
24	31	44	76	53	167	164	56	36	20	23	30	34
25	41	137	68	51	152	150	55	35	20	24	25	33
26	31	46	62	652	138	141	59	34	20	22	29	33
27	30	31	1900	469	133	132	62	33	20	40	146	32
28	29	29	380	258	138	126	80	32	19	44	81	162
29	29	27	180	246	---	151	62	32	19	30	26	54
30	28	27	170	203	---	138	66	32	19	46	27	33
31	28	---	150	164	---	127	---	34	---	37	26	---
TOTAL	2094	969	5150	3908	3803	6793	2477	1413	717	736	1136	1720
MEAN	67.5	32.3	166	126	136	219	82.6	45.6	23.9	23.7	36.6	57.3
MAX	640	137	1900	652	221	880	139	70	31	46	146	581
MIN	19	26	26	48	89	97	55	32	19	18	24	24
AC-FT	4150	1920	10220	7750	7540	13470	4910	2800	1420	1460	2250	3410

CAL YR 1984 TOTAL 16923 MEAN 46.2 MAX 1900 MIN 11 AC-FT 33570
WTR YR 1985 TOTAL 30916 MEAN 84.7 MAX 1900 MIN 18 AC-FT 61320

09497980 CHERRY CREEK NEAR GLOBE, AZ

LOCATION.--Lat 33°49'40", long 110°51'20", in SW¼ sec.30, T.6 N., R.15 E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in Tonto National Forest, on right bank 0.2 mi upstream from Devils Chasm, 13 mi upstream from mouth, and 30 mi north of Globe. Prior to Jan. 17, 1979, on left bank at site 125 ft downstream.

DRAINAGE AREA.--200 mi^2.

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 17, 1979, at site 125 ft downstream at datum 2.95 ft lower.

REMARKS.--Estimated daily discharges: Oct. 9-15. Records good.

AVERAGE DISCHARGE.--20 years, 42.9 ft^3/s, 31,080 acre-ft/yr; median of yearly mean discharges, 23 ft^3/s, 16,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft^3/s Jan. 17, 1979, gage height, unknown, from slope-area measurement of peak flow; minimum daily, 2.4 ft^3/s Sept. 17, 22, 25, 29, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft^3/s and maximum (*), from rating curve extended above 20 ft^3/s on basis of slope-conveyance computations:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	0915	1,090	5.82	Dec. 27	1700	*8,970	*11.88
Dec. 13	0700	970	5.61	Jan. 26	1830	1,880	6.92

Minimum daily discharge, 6.5 ft^3/s July 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	9.6	20	158	140	74	59	35	13	7.1	10	9.5
2	77	9.4	18	127	116	69	59	31	12	7.1	12	8.8
3	431	9.4	16	100	114	65	57	28	12	7.1	20	8.9
4	140	9.3	20	86	107	61	57	26	12	7.0	51	9.1
5	60	9.1	25	75	99	57	56	24	12	6.9	32	8.7
6	43	9.0	22	70	100	54	55	23	12	7.1	14	9.6
7	39	9.0	20	64	102	52	54	23	11	7.4	10	11
8	37	8.8	34	153	113	49	53	22	10	6.9	9.5	8.9
9	35	8.7	64	171	152	48	52	21	9.9	6.8	9.2	8.7
10	33	8.3	59	105	205	48	52	20	9.6	6.6	8.8	8.8
11	31	8.3	353	86	179	52	47	20	9.4	6.6	12	13
12	28	8.3	374	77	147	344	44	20	9.4	6.7	9.7	17
13	24	8.3	650	71	175	188	42	19	9.3	6.5	8.8	10
14	22	8.3	287	64	190	117	41	19	9.0	7.1	8.4	9.2
15	21	8.3	193	58	159	374	38	18	8.8	7.4	8.4	9.0
16	17	8.3	150	54	149	520	36	18	8.6	7.1	8.3	8.6
17	31	8.3	140	50	138	379	34	17	8.5	6.7	8.3	8.4
18	52	8.3	158	47	123	250	32	18	8.3	6.9	8.4	70
19	24	8.3	170	45	110	170	34	17	8.3	15	9.0	64
20	18	8.0	313	42	100	142	32	16	8.3	13	12	22
21	16	8.2	240	41	106	132	35	16	8.2	12	10	14
22	15	8.4	143	40	135	106	36	16	8.0	13	8.8	12
23	13	17	107	40	143	93	32	15	8.1	10	8.6	11
24	13	16	88	46	120	83	30	15	8.0	9.6	8.4	10
25	12	148	75	45	101	73	29	14	8.0	9.6	8.2	10
26	12	99	68	583	91	69	29	14	7.7	9.4	8.7	9.5
27	11	45	2620	608	82	62	32	13	7.5	9.5	8.1	9.4
28	11	31	1120	330	77	61	47	13	7.4	11	8.0	26
29	10	26	647	255	---	60	39	12	7.4	10	9.4	19
30	10	23	320	214	---	60	35	13	7.3	14	8.9	13
31	9.9	---	214	177	---	60	---	13	---	11	10	---
TOTAL	1313.9	594.9	8728	4082	3573	3972	1278	589	279.0	272.1	366.9	457.1
MEAN	42.4	19.8	282	132	128	128	42.6	19.0	9.30	8.78	11.8	15.2
MAX	431	148	2620	608	205	520	59	35	13	15	51	70
MIN	9.9	8.0	16	40	77	48	29	12	7.3	6.5	8.0	8.4
AC-FT	2610	1180	17310	8100	7090	7880	2530	1170	553	540	728	907

CAL YR 1984 TOTAL 14279.9 MEAN 39.0 MAX 2620 MIN 4.8 AC-FT 28320
WTR YR 1985 TOTAL 25505.9 MEAN 69.9 MAX 2620 MIN 6.5 AC-FT 50590

09498400 PINAL CREEK AT INSPIRATION DAM NEAR GLOBE, AZ

LOCATION.--Lat 33°34'23", long 110°54'02", in NE¼NW¼SE¼ sec.26, T.3 N., R.14 E., Gila County, Hydrologic Unit 15060103, in Tonto National Forest, on right bank 20 ft upstream from Inspiration Dam, 3.8 mi upstream from mouth, and 14 mi northwest of the town of Globe.

DRAINAGE AREA.--195 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 24, 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is about 2,800 ft above National Geodetic Vertical Datum of 1929, from topographic map.

AVERAGE DISCHARGE.--5 years (water years 1981-85), 13.5 ft^3/s, 9,780 acre-ft/yr.

REMARKS.--Estimated daily discharges: Oct. 2-4 and Jan. 2-29. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,920 ft^3/s July 9, 1981 (from weather records), gage height, 5.05 ft, from high-water mark by the gage; minimum daily, 1.5 ft^3/s Mar. 10-14, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*), from rating curve extended above 64 ft^3/s on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 2	unknown	*1,530	a*3.56	Dec. 27	1800	1,250	3.20
Oct. 4	unknown	947	a2.8	Sept. 28	1430	609	2.30
Dec. 13	0700	1,060	2.95				

Minimum daily, 1.5 ft^3/s Dec. 1.
a From outside high-water mark.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	1.5	32	51	30	22	12	10	7.9	11	7.4
2	315	11	1.6	30	51	32	20	14	10	7.9	9.0	6.9
3	75	11	1.8	30	51	32	20	12	11	7.9	7.9	6.9
4	170	11	2.0	25	58	28	21	12	11	7.9	7.4	6.9
5	6.0	10	2.1	25	44	26	20	12	11	7.9	6.9	6.9
6	6.0	8.4	2.1	20	42	26	19	14	10	7.9	6.9	6.9
7	6.0	7.0	2.3	20	44	26	21	16	10	7.9	6.9	7.4
8	6.0	8.4	2.6	50	46	26	21	15	10	7.9	6.9	7.4
9	6.0	8.4	2.8	50	51	26	18	13	10	7.9	6.4	7.4
10	6.0	9.0	2.8	40	53	26	19	14	10	7.9	7.4	7.4
11	6.0	9.0	7.9	30	48	26	18	12	10	7.9	7.4	8.4
12	9.0	9.6	7.4	30	46	35	19	12	10	7.9	7.9	7.9
13	16	9.6	290	30	44	38	20	11	9.6	7.9	6.9	7.9
14	14	7.4	24	20	40	33	19	9.0	8.4	7.9	4.8	7.9
15	12	7.4	9.0	20	35	44	23	7.9	8.4	8.4	6.0	7.9
16	12	12	9.0	20	38	44	17	6.9	7.9	9.0	4.8	7.9
17	12	12	9.0	20	40	35	18	6.4	7.9	9.0	4.8	7.9
18	9.0	7.4	9.0	20	40	30	17	7.9	8.4	11	4.8	27
19	9.0	10	9.0	20	42	30	14	7.9	7.9	9.6	6.0	11
20	9.0	7.4	8.4	20	44	30	16	7.4	7.9	9.0	6.9	7.9
21	9.0	9.6	7.9	20	48	33	15	8.4	8.4	7.4	7.4	9.0
22	9.0	9.6	7.9	20	38	28	15	9.0	7.9	5.2	6.9	9.6
23	9.0	13	7.4	20	38	27	16	8.4	7.9	5.2	6.9	10
24	9.0	13	7.4	20	30	23	13	8.4	7.9	5.6	6.9	9.6
25	11	16	8.4	150	30	21	13	8.4	7.4	5.6	7.4	7.9
26	11	10	8.4	150	33	18	14	8.4	7.4	6.0	7.4	8.4
27	10	9.6	400	110	30	21	17	9.0	9.0	6.4	7.4	8.4
28	10	6.0	450	70	32	23	17	9.0	7.9	6.9	7.4	150
29	11	2.0	334	50	---	23	14	9.0	7.9	6.4	6.9	60
30	12	1.8	125	77	---	22	13	9.6	7.9	6.9	6.4	15
31	10	---	51	93	---	22	---	10	---	6.9	6.4	---
TOTAL	826.0	276.6	1811.7	1332	1187	884	529	320.0	269.0	235.1	214.4	461.1
MEAN	26.6	9.22	58.4	43.0	42.4	28.5	17.6	10.3	8.97	7.58	6.92	15.4
MAX	315	16	450	150	58	44	23	16	11	11	11	150
MIN	6.0	1.8	1.5	20	30	18	13	6.4	7.4	5.2	4.8	6.9
AC-FT	1640	549	3590	2640	2350	1750	1050	635	534	466	425	915

CAL YR 1984 TOTAL 5571.5 MEAN 15.2 MAX 450 MIN 1.5 AC-FT 11050
WTR YR 1985 TOTAL 8345.9 MEAN 22.9 MAX 450 MIN 1.5 AC-FT 16550

09498400 PINAL CREEK AT INSPIRATION DAM NEAR GLOBE, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1979 to current year.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS (MG/L AS CACO3) (00900)
OCT 1984											
24...	1015	9.3	3210	7.50	21.5	20.5	1.7	687	7.2	90	1900
NOV											
27...	1355	11	2950	7.90	13.0	17.0	27	667	8.1	93	2000
DEC											
18...	1440	9.3	2960	7.10	15.0	18.0	20	689	8.0	95	1800
JAN 1985											
29...	1600	50	1800	--	13.0	12.5	81	687	--	--	830
MAR											
01...	1700	31	2650	7.95	18.5	18.0	140	688	8.2	97	1500
26...	1300	18	2900	7.98	22.0	21.5	33	688	7.5	95	1800
APR											
24...	1300	13	--	7.99	23.0	23.0	20	688	6.8	--	1400
MAY											
21...	1540	8.2	2800	7.95	35.0	25.0	8.3	686	7.4	100	1900
JUN											
27...	1230	8.9	3000	7.80	37.0	22.5	10	690	8.2	106	1700
JUL											
26...	1325	6.6	2900	8.10	43.0	27.0	1.4	687	7.3	103	1700
AUG											
28...	1400	7.6	3000	8.15	37.5	26.0	1.5	693	7.0	96	2000
SEP											
24...	1445	9.6	2920	7.80	30.5	25.0	3.0	692	7.1	97	2000

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 1984											
24...	1800	560	120	64	0.7	4.4	--	--	132	1900	78
NOV											
27...	1900	600	120	67	0.7	4.5	159	0	128	1800	81
DEC											
18...	1700	570	100	65	0.7	4.7	--	--	133	1800	77
JAN 1985											
29...	0	250	49	38	0.6	3.2	--	--	--	870	42
MAR											
01...	1400	450	92	64	0.7	5.0	122	0	100	1400	69
26...	1700	550	110	64	0.7	4.8	--	--	106	1500	78
APR											
24...	1300	360	110	70	0.9	4.6	--	--	99	1800	77
MAY											
21...	1800	550	130	71	0.7	4.2	--	--	112	1800	79
JUN											
27...	1600	470	120	65	0.7	4.2	129	0	104	1500	80
JUL											
26...	1500	480	110	58	0.6	4.3	--	--	188	1600	78
AUG											
28...	1800	590	120	62	0.6	4.3	--	--	121	1800	82
SEP											
24...	1900	600	120	>5.0	--	4.3	--	--	129	1800	81

> Actual value is known to be greater than value shown.

09498400 PINAL CREEK AT INSPIRATION DAM NEAR GLOBE, AZ--Continued

WATER QUALITY DATA

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT 1984											
24...	0.3	45	2920	2900	4.0	69	<0.10	0.26	0.24	0.5	--
NOV											
27...	0.3	49	2980	2800	4.1	113	0.10	0.24	0.16	0.4	0.5
DEC											
18...	0.3	43	2830	2800	3.8	66	0.20	0.21	0.0	0.2	0.4
JAN 1985											
29...	0.6	26	1440	--	2.0	256	0.30	0.36	0.34	0.7	1.0
MAR											
01...	0.8	41	2410	2200	3.3	206	0.30	0.13	0.77	0.9	1.2
26...	0.7	46	2720	2400	3.7	109	0.20	0.27	0.03	0.3	0.5
APR											
24...	0.7	47	2840	2600	3.9	56	<0.10	0.26	0.34	0.6	--
MAY											
21...	0.6	45	2870	2800	3.9	32	<0.10	0.28	0.02	0.3	--
JUN											
27...	0.4	47	2920	2400	4.0	16	<0.10	0.38	0.0	0.3	--
JUL											
26...	0.2	45	2840	2500	3.9	12	<0.10	0.28	0.12	0.4	--
AUG											
28...	0.2	45	2900	2800	3.9	5	<0.10	0.15	0.25	0.4	--
SEP											
24...	0.2	--	2850	--	--	10	0.10	0.21	0.19	0.4	0.5

DATE	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)
OCT 1984										
24...	--	0.10	--	--	2	4	1	300	11	1500
NOV										
27...	2.2	0.15	--	--	1	4	2	230	8	2700
DEC										
18...	1.8	0.16	0.03	0.09	1	10	2	160	22	3100
JAN 1985										
29...	4.4	0.47	<0.01	--	<1	30	8	1500	37	45000
MAR										
01...	5.3	0.28	0.03	0.09	<1	30	30	2000	16	25000
26...	2.2	0.17	0.02	0.06	5	60	50	850	21	9800
APR										
24...	--	0.08	0.02	0.06	5	70	60	780	31	560
MAY										
21...	--	<0.01	<0.01	--	2	50	50	530	23	2900
JUN										
27...	--	0.03	0.02	0.06	2	20	20	270	22	1700
JUL										
26...	--	0.02	--	--	2	7	6	24	11	190
AUG										
28...	--	0.06	<0.01	--	2	7	5	20	14	220
SEP										
24...	2.2	0.07	0.03	0.09	1	5	5	46	11	940

< Actual value is known to be less than value shown.

09498400 PINAL CREEK AT INSPIRATION DAM NEAR GLOBE, AZ--Continued

WATER QUALITY DATA

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1984										
24...	50	3	14000	13000	--	30	20	--	173	4.3
NOV										
27...	30	7	17000	15000	<0.1	50	20	--	156	4.6
DEC										
18...	40	5	12000	12000	<0.1	60	30	--	204	5.1
JAN 1985										
29...	4	48	2600	6800	<0.1	290	29	--	529	71
MAR										
01...	20	19	20000	16000	<0.1	260	30	55	471	39
26...	30	7	22000	--	0.3	240	70	--	137	6.7
APR										
24...	30	6	23000	26000	<0.1	230	90	--	86	3.0
MAY										
21...	40	14	21000	26000	<0.1	130	60	--	74	1.6
JUN										
27...	30	<1	21000	25000	0.1	90	50	--	5	0.12
JUL										
26...	40	<1	20000	24000	0.1	40	20	--	3	0.05
AUG										
28...	40	5	21000	--	0.1	50	30	--	--	--
SEP										
24...	40	2	19000	15000	<0.1	100	20	--	33	0.86

< Actual value is known to be less than value shown.

09498500 SALT RIVER NEAR ROOSEVELT, AZ

LOCATION.--Lat 33°37'10", long 110°55'15", in SE¼NE¼ sec.9, T.3 N., R.14 E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in Tonto National Forest on left bank 100 ft downstream from bridge on State Highway 288, 0.3 mi downstream from Pinal Creek, 1 mi upstream from diversion dam for power canal, 14 mi east of village of Roosevelt, and 17 mi upstream from Roosevelt Dam.

DRAINAGE AREA.--4,306 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1913 to current year (monthly discharge only January to September 1913) see WSP 1313.

REVISED RECORDS.--WSP 1049: 1914, 1916, 1918-19, 1926. WSP 1343: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,177.14 ft above National Geodetic Vertical Datum of 1929. Prior to 1925, nonrecording gage at diversion dam about 1 mi downstream at different datum. Nonrecording gage at present site and datum 1925 to Jan. 17, 1935. May 20, 1955, to July 30, 1959, supplementary water-stage recorder at diversion dam.

REMARKS.--Records good. Several small diversions for irrigation of about 4,000 acres above station and two trans basin diversions above station, one into basin from Show Low Creek and one out of basin to Willow Creek. Records show inflow to Roosevelt Lake. Tonto Creek also contributes to Roosevelt Lake; see records elsewhere in this report.

AVERAGE DISCHARGE.--72 years, 903 ft^3/s, 654,200 acre-ft/yr; median of yearly mean discharges, 690 ft^3/s, 500,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 117,000 ft^3/s Mar. 14, 1941, gage height, 24.4 ft, from rating curve extended above 55,000 ft^3/s on basis of velocity-area studies and float-area measurements at 66,000 ft^3/s and 102,000 ft^3/s; maximum gage height, 29.35 ft Dec. 19, 1978; minimum discharge, 59 ft^3/s all or part of each day, July 1-4, 7-12, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of about 42 ft^3/s was reported Aug. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1600	11,500	13.17	Jan. 27	0445	12,800	13.57
Dec. 13	1145	8,730	12.20	Feb. 23	1545	5,540	10.32
Dec. 21	0515	9,220	12.38	Mar. 13	0245	20,200	15.60
Dec. 28	0815	*46,600	*20.85	May 1	0845	4,740	10.19
Jan. 9	1230	5,490	10.87				

Minimum daily discharge, 251 ft^3/s July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	602	736	466	4460	2320	4040	3420	4430	1030	320	463	298
2	1160	704	459	3540	1730	4210	3360	4130	997	312	514	297
3	6230	664	452	2770	1490	3840	3200	4130	969	302	544	294
4	3780	633	439	2320	1580	3690	3380	3850	945	292	635	286
5	2180	602	445	1990	1510	3100	3670	3500	929	284	584	273
6	1620	572	439	1790	1370	2700	3960	3280	900	276	579	271
7	1260	550	432	1640	1310	2470	4230	3020	850	271	559	264
8	1090	528	432	1830	1310	2260	4320	2800	809	269	536	262
9	984	500	459	4450	1500	2060	4220	2610	782	274	807	259
10	846	486	500	2770	2010	2000	4060	2540	765	267	576	260
11	753	466	664	1910	2560	3010	3930	2480	755	255	551	271
12	704	459	2350	1540	2180	8120	3910	2350	737	255	503	290
13	680	452	6070	1430	2020	18600	3920	2190	710	255	495	316
14	680	439	5260	1350	2510	11200	3820	2010	689	251	534	334
15	648	439	3000	1250	2630	8910	3730	1850	655	267	489	337
16	736	432	2170	1170	2310	10700	3660	1720	634	275	444	303
17	1010	419	1720	1110	2440	7980	3570	1650	603	292	410	360
18	1130	426	1780	1060	2680	6190	3420	1570	571	286	389	499
19	1030	426	2310	998	2830	5560	3420	1530	544	348	372	1020
20	936	426	3580	972	2850	5120	3240	1510	519	404	370	641
21	881	426	7060	958	3010	4580	2890	1480	493	433	361	808
22	863	413	3250	945	3470	4280	2730	1400	468	389	359	708
23	854	432	2010	947	4590	4080	2680	1320	447	376	351	667
24	846	479	1470	977	4100	3880	2450	1260	435	383	335	588
25	863	535	1240	1010	3020	3860	2200	1210	417	358	335	528
26	872	1070	1050	2660	2660	3960	2050	1170	389	358	326	493
27	863	633	9440	9780	2580	4000	2140	1160	372	361	346	465
28	863	507	36600	5990	2600	3860	2330	1150	358	406	438	528
29	854	479	17400	3820	---	3910	3070	1120	348	374	358	677
30	812	466	9610	3230	---	4040	3860	1080	335	389	330	926
31	770	---	5960	2820	---	3610	---	1050	---	423	310	---
TOTAL	37400	15799	128517	73487	67170	159820	100840	66550	19455	10005	14203	13523
MEAN	1206	527	4146	2371	2399	5155	3361	2147	648	323	458	451
MAX	6230	1070	36600	9780	4590	18600	4320	4430	1030	433	807	1020
MIN	602	413	432	945	1310	2000	2050	1050	335	251	310	259
AC-FT	74180	31340	254900	145800	133200	317000	200000	132000	38590	19840	28170	26820

CAL YR 1984 TOTAL 356983 MEAN 975 MAX 36600 MIN 138 AC-FT 708100
WTR YR 1985 TOTAL 706769 MEAN 1936 MAX 36600 MIN 251 AC-FT 1402000

09498500 SALT RIVER NEAR ROOSEVELT, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1958 to October 1967, January 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: April 1958 to October 1967.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
OCT 1984												
23...	1330	854	1090	7.70	15.0	14.0	8.0	702	9.7	103	22	<1
NOV												
28...	1410	507	1540	8.40	11.0	7.5	84	705	11.1	--	18	270
DEC												
19...	1450	2270	730	7.20	10.5	7.0	37	704	11.4	--	25	K7
JAN 1985												
30...	1335	3180	495	--	8.0	7.0	48	--	--	--	25	K16
FEB												
27...	1510	2600	852	8.40	22.0	11.0	18	704	10.2	100	17	K9
MAR												
25...	1400	3850	455	8.30	29.0	13.5	20	705	8.0	83	20	K32
APR												
23...	1400	2680	530	8.20	23.0	17.0	7.7	705	8.4	94	47	K2
MAY												
22...	1615	1400	800	8.30	31.5	24.0	3.7	700	7.5	97	14	K2
JUN												
26...	1230	389	2100	7.80	26.5	26.5	1.8	701	8.4	115	13	K1
JUL												
25...	1710	339	2120	8.45	37.0	29.0	90	700	7.1	--	38	K30
AUG												
27...	1400	370	2500	8.50	42.0	30.0	40	707	6.5	--	16	E8000
SEP												
25...	1430	534	1520	8.10	32.5	23.0	400	702	8.0	102	--	K51

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT 1984												
23...	K7	170	48	48	13	140	5	4.0	--	--	125	61
NOV												
28...	350	270	120	73	21	200	5	5.3	185	1.0	154	120
DEC												
19...	110	140	45	39	11	89	3	3.0	--	--	--	40
JAN 1985												
30...	K59	150	0	43	11	>5.0	--	2.1	--	--	--	57
FEB												
27...	K8	160	61	44	12	>5.0	--	2.3	118	1.0	98	60
MAR												
25...	K14	120	35	32	8.8	>5.0	--	1.8	--	--	81	35
APR												
23...	K7	110	36	30	8.4	>5.0	--	2.5	--	--	74	33
MAY												
22...	K5	140	40	38	10	110	4	3.0	--	--	96	50
JUN												
26...	--	280	150	72	25	280	7	7.0	163	0	133	110
JUL												
25...	K67	270	94	70	22	270	7	7.3	--	--	171	100
AUG												
27...	620	320	150	83	27	380	10	8.9	--	--	167	120
SEP												
25...	80	210	9	58	17	220	7	4.9	--	--	206	84

K Based on non-ideal colony count.
E Estimated
> Actual value is known to be greater than value shown.

09498500 SALT RIVER NEAR ROOSEVELT, AZ--Continued

WATER QUALITY DATA

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT 1984 23...	230	0.2	594	9	<0.10	0.01	0.29	0.3	--	--	0.06	<1
NOV 28...	310	0.2	851	76	<0.10	0.03	0.67	0.7	--	--	0.06	4
DEC 19...	140	0.1	377	63	<0.10	0.08	0.62	0.7	--	--	0.15	2
JAN 1985 30...	62	0.1	288	88	<0.10	0.08	0.32	0.4	--	--	0.15	3
FEB 27...	96	0.1	362	24	<0.10	0.06	0.54	0.6	--	--	0.07	2
MAR 25...	63	0.2	255	31	<0.10	0.04	0.36	0.4	--	--	0.13	<1
APR 23...	91	0.1	290	18	<0.10	0.04	0.36	0.4	--	--	0.06	1
MAY 22...	170	0.2	434	3	<0.10	0.04	0.26	0.3	--	--	0.04	2
JUN 26...	490	0.2	1110	9	<0.10	0.04	0.16	0.2	--	--	0.01	4
JUL 25...	490	0.2	1140	108	0.20	0.09	0.41	0.5	0.7	3.1	0.12	6
AUG 27...	640	0.2	1400	33	<0.10	0.07	0.33	0.4	--	--	0.06	6
SEP 25...	350	0.2	835	122	<0.10	0.06	0.44	0.5	--	--	0.13	5

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
OCT 1984 23...	2	45	80	<1	<1	4	1	7	8	330	23	2
NOV 28...	3	58	130	<1	1	6	3	11	4	2100	3	3
DEC 19...	2	43	80	<1	<1	12	10	43	16	9300	160	4
JAN 1985 30...	2	36	40	<1	<1	20	3	90	7	21000	130	11
FEB 27...	3	36	40	<1	2	6	<1	24	4	2100	8	<1
MAR 25...	<1	26	30	7	<1	8	<1	23	4	3800	7	7
APR 23...	2	31	40	1	<1	19	1	18	6	2400	21	8
MAY 22...	1	30	60	1	<1	21	<1	16	3	500	7	3
JUN 26...	4	<100	160	<1	1	2	<1	7	2	90	20	1
JUL 25...	6	<100	110	4	3	16	<1	7	13	3400	40	3
AUG 27...	5	100	230	<1	1	15	<1	10	5	1700	30	3
SEP 25...	4	61	130	2	<1	10	<1	11	8	3300	6	2

< Actual value is known to be less than value shown.

09498500 SALT RIVER NEAR ROOSEVELT, AZ--Continued

WATER QUALITY DATA

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1984											
23...	6	110	90	0.1	<1	<1	2	10	3	12	28
NOV											
28...	4	360	220	<0.1	<1	<1	1	40	<3	53	73
DEC											
19...	<1	270	51	0.1	<1	<1	<1	30	20	105	644
JAN 1985											
30...	1	600	--	0.1	<1	<1	<1	60	12	1570	13400
FEB											
27...	<1	230	150	<0.1	<1	<1	<1	20	<3	72	505
MAR											
25...	5	170	78	0.3	<1	<1	<1	20	7	--	--
APR											
23...	5	210	89	<0.1	<1	<1	<1	50	12	63	456
MAY											
22...	3	120	100	<0.1	<1	<1	<1	<10	<3	10	38
JUN											
26...	2	480	480	0.2	<1	<1	<1	30	10	41	43
JUL											
25...	1	330	130	0.2	<1	<1	<1	30	40	251	230
AUG											
27...	3	440	310	<0.1	<1	<1	<1	20	10	55	55
SEP											
25...	2	380	200	<0.1	<1	<1	<1	30	8	213	307

< Actual value is known to be less than value shown.

09498870 RYE CREEK NEAR GISELA, AZ

LOCATION.--Lat 34°01'57", long 111°17'26", in SW¼ sec.13, T.8 N., R.10 E., Gila County, Hydrologic Unit 15060105, in Tonto National Forest, on right bank, 0.5 mi upstream from mouth, 0.8 mi downstream from bridge on county road, and 4.8 mi south of Gisela.

DRAINAGE AREA.--122 mi^2.

PERIOD OF RECORD.--December 1965 to September 1985 (discontinued).

REVISED RECORDS.--WRD Ariz. 1969: 1967.

GAGE.--Water-stage recorder. Elevation of gage is 2,730 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 19, 1967, at datum 1.00 ft higher; Dec. 19, 1967 to Sept. 30, 1983 at datum 2.0 higher.

REMARKS.--Estimated daily discharges: Aug. 3-23 and Sept. 18-30. Records fair.

AVERAGE DISCHARGE.--19 years, 26.7 ft^3/s, 19,340 acre-ft/yr; median of yearly mean discharges, 13 ft^3/s, 9,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,400 ft^3/s Sept. 5, 1970, gage height, 14.1 ft, in gage well, 18.7 ft, from profile past gage, from rating curve extended above 850 ft^3/s on basis of slope-area measurements at gage heights 9.0 and 14.1 ft, datum then in use; minimum daily, 0.20 ft^3/s July 5, 6, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 11	2100	724	4.32	Dec. 27	1500	*2,300	*6.17
Dec. 13	0500	644	4.17				

Minimum daily, 1.6 ft^3/s Aug. 29 to Sept. 8-10, and Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.8	4.2	73	53	36	60	13	4.2	2.7	3.0	1.6
2	1.7	1.8	3.9	46	41	32	68	11	4.2	2.7	2.7	1.6
3	205	1.8	3.3	30	46	27	63	10	4.2	2.7	60	1.6
4	136	1.8	3.0	22	60	24	53	8.9	4.2	2.4	100	1.6
5	24	1.8	3.0	16	46	18	44	8.0	4.2	2.4	20	1.6
6	8.0	1.8	3.0	14	39	17	34	7.4	4.2	2.4	8.0	1.7
7	4.2	1.8	3.0	11	41	14	27	7.4	4.2	2.4	5.0	1.7
8	2.4	1.9	3.0	25	58	14	22	7.2	3.9	2.4	4.0	1.6
9	1.9	1.9	70	60	73	13	17	6.9	3.9	2.4	3.0	1.6
10	1.9	1.9	36	36	88	13	15	6.7	3.6	2.4	3.0	1.6
11	1.8	1.9	223	29	78	21	14	6.7	3.6	2.2	3.0	28
12	1.9	1.9	300	24	68	88	13	6.7	3.6	2.2	2.0	6.2
13	1.9	1.9	399	20	75	66	12	6.2	3.6	2.0	2.0	2.0
14	1.8	1.9	210	15	85	49	11	6.2	3.6	2.0	2.0	1.9
15	1.9	1.9	126	13	75	66	10	6.2	3.6	2.0	2.0	1.7
16	1.8	1.9	78	11	68	103	7.7	6.2	3.6	2.4	2.0	1.7
17	1.8	1.9	63	9.0	68	110	6.2	6.0	3.6	2.2	2.0	1.6
18	1.8	1.9	56	8.5	63	91	11	6.0	3.6	2.2	2.0	170
19	1.7	1.9	60	7.7	56	78	9.5	5.7	3.3	2.2	2.0	36
20	1.7	1.9	85	7.2	53	66	8.9	5.7	3.6	2.2	2.0	7.0
21	1.7	1.9	103	6.9	68	53	8.9	5.5	3.6	2.2	2.0	3.0
22	1.7	1.9	78	6.4	75	46	15	5.2	3.6	2.0	2.0	3.0
23	1.7	20	60	6.4	70	36	13	5.2	3.6	2.0	1.9	3.0
24	1.7	5.2	44	7.2	60	34	11	5.2	3.3	2.0	1.7	3.0
25	1.7	85	32	7.2	56	30	10	5.0	3.6	2.0	1.7	3.0
26	1.7	73	27	96	49	24	10	4.6	3.0	2.0	1.7	3.0
27	1.8	20	794	286	39	21	11	4.6	3.7	2.0	1.7	3.0
28	1.8	9.5	720	185	36	22	15	4.6	2.7	3.3	1.7	3.0
29	1.8	6.7	395	133	---	49	18	4.6	2.7	6.7	1.6	3.0
30	1.8	5.5	206	97	---	51	15	4.2	2.7	3.9	1.6	3.0
31	1.8	---	123	78	---	49	---	4.6	---	3.0	1.6	---
TOTAL	424.1	266.0	4314.4	1386.5	1687	1361	633.2	201.4	109.0	77.6	248.9	302.3
MEAN	13.7	8.87	139	44.7	60.3	43.9	21.1	6.50	3.63	2.50	8.03	10.1
MAX	205	85	794	286	88	110	68	13	4.2	6.7	100	170
MIN	1.7	1.8	3.0	6.4	36	13	6.2	4.2	2.7	2.0	1.6	1.6
AC-FT	841	528	8560	2750	3350	2700	1260	399	216	154	494	600

CAL YR 1984 TOTAL 7291.1 MEAN 19.9 MAX 794 MIN 1.6 AC-FT 14460
WTR YR 1985 TOTAL 11011.4 MEAN 30.2 MAX 794 MIN 1.6 AC-FT 21840

09499000 TONTO CREEK ABOVE GUN CREEK, NEAR ROOSEVELT, AZ

LOCATION.--Lat 33°58'48", long 111°18'10", in SW¼NE¼ sec.2, T.7 N., R.10 E., Gila County, Hydrologic Unit 15060105, in Tonto National Forest, on left bank 600 ft upstream from Gun Creek, 17 mi upstream from high-water line of Roosevelt Lake, and 24 mi northwest of Roosevelt.

DRAINAGE AREA.--675 mi^2.

PERIOD OF RECORD.--December 1940 to current year.

REVISED RECORDS.--WSP 1283: Drainage area. WDR AZ-80-1: 1978-79(M).

GAGE.--Water-stage recorder. Datum of gage is 2,523.14 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Small diversions above station for irrigation.

AVERAGE DISCHARGE.--44 years (water years 1942-85), 157 ft^3/s, 113,700 acre-ft/yr; median of yearly mean discharges, 92 ft^3/s, 66,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,400 ft^3/s Jan. 17, 1979 and Feb. 15, 1980, gage height, 17.0 ft, maximum gage height, 18.2 ft Sept. 5, 1970; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1345	6,870	7.61	Jan. 26	2100	13,200	8.79
Nov. 25	1630	8,510	7.87	Mar. 12	1200	4,500	7.28
Dec. 13	0600	14,100	9.19	Mar. 16	0200	3,330	7.02
Dec. 27	1630	*43,300	*14.97				

Minimum daily discharge, 4.4 ft^3/s Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	13	61	576	509	292	365	112	32	16	25	38
2	15	4.4	55	401	366	285	338	96	30	15	22	23
3	1860	15	52	343	365	244	310	89	28	15	87	18
4	575	17	52	250	402	211	292	82	27	15	39	15
5	137	18	54	251	410	188	262	74	27	15	28	15
6	71	19	53	227	399	165	241	69	27	15	24	16
7	47	23	49	203	406	150	226	66	25	15	20	19
8	34	20	53	331	459	138	212	64	24	15	18	18
9	27	22	216	730	662	129	200	60	22	16	17	17
10	22	21	175	423	935	134	189	56	19	16	17	17
11	19	22	2810	332	866	219	175	53	18	16	18	40
12	18	23	4800	308	559	2150	161	51	19	17	18	58
13	22	22	10500	267	669	932	147	50	20	17	17	42
14	20	24	3370	233	791	434	134	45	18	17	17	25
15	17	24	1150	208	600	828	125	48	18	17	17	23
16	23	24	544	191	554	2610	119	49	17	17	18	21
17	30	25	431	172	519	1990	109	46	17	17	19	19
18	43	24	359	155	471	1360	106	44	17	18	19	349
19	75	23	411	141	410	917	110	44	17	18	20	325
20	52	23	551	125	372	691	97	43	17	61	24	79
21	41	24	718	118	456	550	95	42	16	41	25	49
22	38	24	254	115	929	443	124	42	16	29	26	41
23	34	98	149	120	914	359	113	43	17	28	20	35
24	29	125	103	137	579	310	117	43	17	21	16	32
25	26	2250	75	152	415	293	107	41	18	17	15	37
26	24	939	62	2640	341	271	95	39	17	15	16	27
27	23	213	8620	5610	301	244	99	36	18	16	12	25
28	14	118	7240	2150	283	214	119	33	18	17	14	41
29	14	85	5110	1030	---	341	135	31	17	26	15	34
30	14	72	1250	836	---	419	137	33	17	25	14	33
31	13	---	797	672	---	377	---	34	---	27	28	---
TOTAL	3398	4354.4	50124	19447	14942	17888	5059	1658	610	630	685	1531
MEAN	110	145	1617	627	534	577	169	53.5	20.3	20.3	22.1	51.0
MAX	1860	2250	10500	5610	935	2610	365	112	32	61	87	349
MIN	13	4.4	49	115	283	129	95	31	16	15	12	15
AC-FT	6740	8640	99420	38570	29640	35480	10030	3290	1210	1250	1360	3040

CAL YR 1984 TOTAL 70353.7 MEAN 192 MAX 10500 MIN 3.4 AC-FT 139500
WTR YR 1985 TOTAL 120326.4 MEAN 330 MAX 10500 MIN 4.4 AC-FT 238700

09501000 RESERVOIR SYSTEM ON SALT RIVER AT AND BELOW ROOSEVELT DAM, AZ

LOCATION.--This system comprises four storage reservoirs created by four separate dams on Salt River, Hydrologic Unit 15060106: Roosevelt Lake, formed by Roosevelt Dam in sec.20, T.4 N., R.12 E. (unsurveyed), on State Highway 88; Apache Lake, formed by Horse Mesa Dam, 17 mi downstream from Roosevelt Dam; Canyon Lake, formed by Mormon Flat Dam, 27 mi downstream from Roosevelt Dam; Saguaro Lake, formed by Stewart Mountain Dam, 37 mi downstream from Roosevelt Dam. Contents given herein are combined contents of the four reservoirs.

DRAINAGE AREA.--6,211 mi^2, at Stewart Mountain Dam.

PERIOD OF RECORD.--April 1910 to current year. Prior to October 1934, monthend contents only, published in WSP 1313. Evaporation: April 1958 to June 1963.

REVISED RECORDS.--WSP 1283: Drainage area. WRD Ariz. 1975: 1974.

GAGES.--Roosevelt Lake, water-stage indicator in powerplant connected to long distance transmitter on lake (water-stage recorder prior to Jan. 1, 1967); Apache Lake, water-stage indicator in powerplant connected to long distance transmitter on lake since April 1949 (prior to that date, nonrecording gage or reference mark); Canyon and Saguaro Lakes, mercury column gages.

REMARKS.--Total capacity of the four reservoirs is 1,710,000 acre-ft, divided as follows: Roosevelt Lake, 1,337,000 acre-ft; Apache Lake, 245,000 acre-ft; Canyon Lake, 58,000 acre-ft; Saguaro Lake, 70,000 acre-ft. Dead storage negligible. Dams forming these reservoirs were built as follows: Roosevelt 1905-11; Horse Mesa 1924-27; Mormon Flat 1923-26; Stewart Mountain 1928-30. The four dams forming these reservoirs completely develop the fall in the Salt River from Roosevelt Lake to Stewart Mountain Dam. Elevation of water surface varies from 1,422.0 ft, sill of lowest outlet in Stewart Mountain Dam, to 2,136 ft, top of spillway gates in raised position on Roosevelt Dam. See 1978 to 1980 reports for dates of spill prior to 1981 water year. Records given herein represent usable contents. Water from this system is used for irrigation of Salt River Valley and for generation of power.

COOPERATION.--Records of daily contents furnished by Salt River Valley Water Users' Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents of system, 1,764,000 acre-ft May 22, 1941; minimum, 20,680 acre-ft Sept. 16, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum contents of system, 1,702,000 acre-ft Apr. 28, May 1, 2; minimum, 1,317,000 acre-ft Oct. 1, 2.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1317000	1383000	1415000	1571000	1581000	1630000	1653000	1702000	1682000	1613000	1530000	1449000
2	1317000	1384000	1416000	1558000	1577000	1626000	1655000	1702000	1681000	1609000	1527000	1446000
3	1324000	1385000	1417000	1552000	1573000	1616000	1657000	1701000	1679000	1606000	1525000	1444000
4	1336000	1386000	1418000	1554000	1569000	1611000	1659000	1701000	1677000	1604000	1522000	1440000
5	1341000	1387000	1419000	1556000	1564000	1609000	1662000	1700000	1676000	1600000	1521000	1437000
6	1345000	1388000	1420000	1557000	1559000	1608000	1665000	1699000	1675000	1597000	1518000	1433000
7	1348000	1389000	1421000	1557000	1558000	1607000	1668000	1699000	1673000	1594000	1515000	1432000
8	1350000	1390000	1421000	1558000	1558000	1606000	1673000	1699000	1672000	1591000	1513000	1429000
9	1351000	1391000	1423000	1563000	1558000	1605000	1675000	1700000	1670000	1588000	1511000	1426000
10	1352000	1391000	1423000	1570000	1559000	1606000	1676000	1700000	1668000	1585000	1509000	1424000
11	1353000	1392000	1426000	1573000	1561000	1606000	1678000	1699000	1665000	1582000	1506000	1421000
12	1353000	1393000	1434000	1573000	1564000	1610000	1680000	1700000	1663000	1578000	1504000	1419000
13	1355000	1393000	1450000	1573000	1567000	1632000	1683000	1701000	1661000	1575000	1501000	1417000
14	1356000	1395000	1476000	1573000	1570000	1652000	1685000	1701000	1659000	1572000	1499000	1416000
15	1357000	1395000	1487000	1572000	1573000	1654000	1686000	1701000	1657000	1569000	1496000	1413000
16	1358000	1395000	1493000	1570000	1577000	1653000	1688000	1700000	1654000	1566000	1494000	1411000
17	1359000	1396000	1497000	1569000	1581000	1654000	1690000	1700000	1652000	1564000	1490000	1409000
18	1361000	1396000	1501000	1567000	1585000	1645000	1692000	1698000	1650000	1562000	1488000	1410000
19	1363000	1397000	1502000	1566000	1589000	1631000	1694000	1698000	1647000	1559000	1485000	1411000
20	1365000	1398000	1504000	1564000	1593000	1628000	1695000	1697000	1645000	1557000	1482000	1412000
21	1367000	1398000	1513000	1562000	1598000	1630000	1696000	1697000	1641000	1556000	1480000	1412000
22	1369000	1399000	1522000	1561000	1602000	1632000	1697000	1696000	1638000	1555000	1477000	1413000
23	1370000	1400000	1520000	1558000	1608000	1634000	1698000	1695000	1636000	1553000	1474000	1412000
24	1371000	1402000	1516000	1556000	1618000	1635000	1699000	1694000	1633000	1550000	1472000	1412000
25	1372000	1403000	1511000	1555000	1624000	1636000	1700000	1693000	1630000	1547000	1469000	1410000
26	1374000	1408000	1505000	1556000	1627000	1637000	1699000	1691000	1627000	1545000	1466000	1410000
27	1376000	1411000	1497000	1573000	1628000	1640000	1700000	1690000	1625000	1542000	1463000	1408000
28	1377000	1412000	1555000	1595000	1629000	1642000	1702000	1687000	1622000	1540000	1460000	1408000
29	1379000	1414000	1600000	1591000	---	1645000	1700000	1687000	1619000	1537000	1458000	1409000
30	1380000	1414000	1601000	1589000	---	1647000	1701000	1686000	1616000	1535000	1455000	1408000
31	1381000	---	1586000	1586000	---	1650000	---	1684000	---	1533000	1453000	---
MAX	1381000	1414000	1601000	1595000	1629000	1654000	1702000	1702000	1682000	1613000	1530000	1449000
MIN	1317000	1383000	1415000	1552000	1558000	1605000	1653000	1684000	1616000	1533000	1453000	1408000
(*)	+66000	+32000	+156000	+10000	+49000	+23000	+49000	-20000	-69000	-83000	-81000	-40000

CAL YR 1984 MAX 1601000 MIN 1309000 * +64000
WTR YR 1985 MAX 1702000 MIN 1317000 * +92000

* Change in contents, in acre-feet (from 0800 first of month).
NOTE.--Contents at 0800 Oct. 1, 1979, 1,459,000 acre-feet. Prior to Oct. 1, 1972, contents were given at 2400.

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ
(National stream-quality accounting network station)

LOCATION.--Lat 33°33'10", long 111°34'33", in NW¼NW¼ sec.6, T.2 N., R.8 E. (unsurveyed), Maricopa County, Hydrologic Unit 15060106, on left bank 3.5 mi downstream from Stewart Mountain Dam and 6 mi upstream from Verde River.

DRAINAGE AREA.--6,232 mi^2 of which 21 mi^2 is below Stewart Mountain Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1930 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Stewart Mountain Dam" 1934-41.

REVISED RECORDS.--WSP 1343: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,370 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 27, 1934, at site 3.2 mi upstream at different datum. Sept. 27, 1934, to Jan. 20, 1950, at site 2.8 mi upstream at datum 1,396.33 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by four reservoirs above station. (See elsewhere in this report.) Entire flow (except during infrequent periods of extreme flooding) is diverted at Granite Reef Dam, 10 mi downstream, for irrigation in Salt River Valley and for municipal use by the city of Phoenix.

AVERAGE DISCHARGE.--55 years, 978 ft^3/s, 708,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,200 ft^3/s Feb. 15, 1980, gage height, 25.0 ft, from highwater mark inside gage well, from rating curve extended above 10,000 ft^3/s defined by known release rates from Stewart Mountain Dam and recorded gage heights; maximum daily discharge, 64,000 ft^3/s Feb. 16, 1980; no flow at times in recent years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 18,300 ft^3/s Dec. 29; minimum daily, 6.8 ft^3/s Oct. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	797	17	13	12300	6020	3730	2750	3990	1760	1770	1790	1710
2	742	16	13	9620	5230	9290	2620	4300	1700	1880	1760	1640
3	851	16	13	3660	5360	7680	2360	4330	1800	1950	1780	1720
4	840	16	15	1960	5340	6060	2390	4220	1680	1790	1760	1770
5	573	16	13	1910	5270	4150	2390	3980	1680	1780	1740	1780
6	307	16	13	1930	3820	3730	2370	3310	1800	1820	1740	1640
7	383	16	12	1960	2630	3730	2350	2650	1770	1850	1750	1600
8	397	16	14	2220	2630	3030	3050	2360	1790	1760	1790	1620
9	349	16	13	2450	2630	2590	3760	2360	1780	1830	1780	1450
10	383	16	14	2450	2590	2580	3510	2250	1780	1880	1700	1420
11	322	16	15	2520	2520	2570	2990	1980	1750	1880	1730	1400
12	97	16	15	2470	2100	2620	2950	1820	1740	1880	1810	1340
13	18	16	16	2420	1890	5190	2960	1820	1780	1820	1780	1330
14	13	16	15	2420	1910	8350	2960	1820	1770	1790	1700	1380
15	10	16	129	2420	1760	11600	2830	1820	1750	1780	1760	1280
16	7.2	16	431	2420	1220	11800	2460	1800	1820	1750	1760	1240
17	6.8	16	431	2410	1080	12900	2460	1820	1810	1740	1740	1350
18	6.8	16	1270	2420	1080	15200	2460	1790	1820	1600	1790	1320
19	7.2	16	1970	2400	1080	12100	2460	1810	1950	1290	1810	916
20	14	16	1950	2400	1090	5320	2460	1830	1690	1260	1730	810
21	16	15	1930	2420	1160	4010	2280	1840	1700	1190	1710	845
22	17	15	3200	2420	1100	3520	1820	1810	1750	1210	1750	866
23	17	16	5020	2420	598	3590	1800	1830	1750	1520	1630	866
24	17	16	5020	2420	739	3630	1850	1860	1720	1760	1760	939
25	17	15	5020	2250	1490	3420	2250	1850	1780	1810	1810	1020
26	17	14	5780	109	2480	2860	2080	1810	1770	1620	1800	1020
27	17	14	8290	203	2430	2800	1800	1770	1720	1710	1800	1080
28	17	14	14800	7560	2540	2800	2330	1770	1800	1760	1790	973
29	17	14	18300	7960	---	2800	2960	1830	1840	1740	1810	710
30	17	14	18200	6780	---	2800	3310	1810	1770	1780	1770	710
31	17	---	16600	6400	---	2800	---	1820	---	1830	1760	---
TOTAL	6310.0	468	108535	105702	69787	169250	77020	72060	53020	53030	54590	37745
MEAN	204	15.6	3501	3410	2492	5460	2567	2325	1767	1711	1761	1258
MAX	851	17	18300	12300	6020	15200	3760	4330	1950	1950	1810	1780
MIN	6.8	14	12	109	598	2570	1800	1770	1680	1190	1630	710
AC-FT	12520	928	215300	209700	138400	335700	152800	142900	105200	105200	108300	74870

CAL YR	1984	TOTAL	402680.0	MEAN	1100	MAX	18300	MIN	6.8	AC-FT	798700
WTR YR	1985	TOTAL	807517.0	MEAN	2212	MAX	18300	MIN	6.8	AC-FT	1602000

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ--Continued

WATER-QUALITY RECORDS

LOCATION.--Daily record of specific conductance and water temperature collected at Stewart Mountain Dam, 3.5 mi upstream from gaging station.

PERIOD OF RECORD.--December 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1982, March 1983 to current year.
WATER TEMPERATURES: December 1950 to September 1982, March 1983 to current year.

REMARKS.--No flow between specific conductance sampling point and gaging station except during infrequent periods of heavy local rains. Unpublished daily specific conductance measurements for period December 1950 to September 1964, available from district office in Tucson, Ariz.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily observed, 2,490 microsiemens Aug. 20, 1951; minimum daily observed, 470 microsiemens Feb. 10, 1980.
WATER TEMPERATURES: Maximum daily observed, 29.0°C Aug. 24, 26, 27, 1951, Sept. 11, 12, 1969; minimum daily observed, 9.0°C Feb. 1, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily observed, 792 microsiemens Jan. 29-31; minimum daily observed, 674 microsiemens Aug. 22.
WATER TEMPERATURES: Maximum daily observed, 25.0°C Oct. 1, 2, 5, 6; minimum daily observed, 11.0°C on several days during Jan. and Feb.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
NOV 1984											
29...	1145	14	746	8.20	15.0	12.0	1.8	728	9.7	94	<10
JAN 1985											
31...	1055	6260	774	8.20	9.5	11.0	9.1	723	10.7	103	22
MAR											
27...	1230	2760	763	8.30	22.0	15.0	5.1	724	8.0	84	28
MAY											
23...	1240	1840	735	8.30	34.5	17.0	3.8	723	9.4	103	20
JUL											
24...	1050	1840	720	8.30	38.0	22.0	6.0	720	8.2	100	24
SEP											
27...	1125	1220	680	8.35	33.0	22.0	5.1	722	8.0	97	--

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)
NOV 1984											
29...	<1	K1	150	29	43	11	88	3	3.6	151	0
JAN 1985											
31...	K1	K7	160	45	45	11	90	3	3.1	138	0
MAR											
27...	<1	<1	170	58	47	12	92	3	3.1	--	--
MAY											
23...	K2	<1	160	44	44	11	87	3	3.0	--	--
JUL											
24...	110	K23	150	32	43	11	85	3	3.4	--	--
SEP											
27...	K16	K28	140	0	40	10	77	3	3.1	--	--

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ--Continued

WATER QUALITY DATA

DATE	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
NOV 1984 29...	125	44	130	0.3	14	407	410	0.55	6	<0.10	<0.10
JAN 1985 31...	113	48	150	0.2	17	429	430	0.58	6	<0.10	<0.10
MAR 27...	109	49	140	0.2	16	420	430	0.57	2	<0.10	<0.10
MAY 23...	111	50	140	0.2	15	399	420	0.54	3	<0.10	<0.10
JUL 24...	121	46	130	0.2	16	394	410	0.54	13	<0.10	<0.10
SEP 27...	188	42	120	0.2	16	382	420	0.52	3	<0.10	<0.10

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)
NOV 1984 29...	0.01	<0.01	0.19	0.2	0.01	0.01	0.02	0.06	10	2	2
JAN 1985 31...	0.04	0.03	0.16	0.2	0.05	0.02	0.03	0.09	--	3	3
MAR 27...	0.04	0.02	0.56	0.6	0.04	0.02	0.02	0.06	<10	2	2
MAY 23...	0.04	0.08	0.46	0.5	0.04	0.02	0.02	0.06	--	2	2
JUL 24...	0.03	0.02	0.47	0.5	0.07	0.02	0.02	0.06	<10	3	3
SEP 27...	0.04	0.04	0.36	0.4	0.03	0.02	0.01	0.03	20	3	3

DATE	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)
NOV 1984 29...	46	<0.5	60	<1	<1	9	5	<3	4	2	--
JAN 1985 31...	55	--	70	<1	<1	2	1	--	9	2	460
MAR 27...	56	<0.5	70	<1	1	4	<1	<3	12	5	--
MAY 23...	55	--	60	1	<1	8	<1	--	11	6	200
JUL 24...	54	<0.5	30	2	1	9	<1	<3	15	11	--
SEP 27...	54	<0.5	60	1	<1	5	<1	<3	10	6	--

< Actual value is known to be less then value shown.

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ--Continued

WATER QUALITY DATA

DATE	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)
NOV 1984 29...	<3	3	3	61	60	20	0.1	<0.1	<10	1
JAN 1985 31...	8	4	<1	--	10	5	<0.1	--	--	--
MAR 27...	11	6	4	61	40	15	0.1	<0.1	<10	4
MAY 23...	14	2	5	--	20	7	<0.1	--	--	--
JUL 24...	4	2	1	52	50	13	0.1	<0.1	<10	<1
SEP 27...	11	2	1	53	60	16	<0.1	<0.1	<10	<1

DATE	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
NOV 1984 29...	<1	<1	<1	300	<6	10	6	50	1	0.04
JAN 1985 31...	<1	<1	<1	--	--	<10	8	76	10	169
MAR 27...	<1	<1	<1	310	<6	30	39	80	7	52
MAY 23...	<1	<1	<1	--	--	<10	15	58	7	35
JUL 24...	<1	<1	<1	300	<6	50	48	87	7	35
SEP 27...	<1	<1	<1	280	<6	30	9	85	8	26

< Actual value is known to be less than value shown.

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	718	---	---	---	770	---	760	715	740	731	707	688
2	728	---	---	752	760	775	740	737	727	737	---	680
3	760	---	---	---	750	755	---	750	737	711	698	681
4	681	---	---	740	762	750	732	760	735	---	701	690
5	699	---	---	725	775	775	755	752	735	719	701	690
6	711	---	---	715	775	760	750	752	740	725	700	695
7	692	---	---	752	770	750	750	760	732	720	701	699
8	717	---	---	739	770	762	750	760	747	720	697	695
9	715	---	---	752	782	770	750	752	745	720	701	692
10	717	---	---	750	770	775	740	752	735	720	699	689
11	708	---	---	752	770	770	740	759	741	720	697	685
12	729	---	---	752	780	770	750	752	745	720	691	690
13	---	---	---	750	780	770	750	753	741	720	691	690
14	---	---	---	752	770	775	740	752	749	725	---	682
15	---	---	---	750	770	770	740	753	735	716	691	688
16	---	---	749	760	775	770	740	755	726	720	691	685
17	---	---	753	760	770	770	737	752	732	709	677	690
18	---	---	754	760	775	775	732	752	731	711	688	690
19	---	---	775	762	780	762	735	752	720	710	682	689
20	---	---	739	770	770	762	732	752	721	707	675	690
21	---	---	739	760	775	765	735	750	719	711	675	690
22	---	---	739	775	787	760	735	749	730	711	674	690
23	---	---	740	762	780	760	730	749	719	707	682	685
24	---	---	731	752	780	760	730	749	726	707	691	685
25	---	---	---	762	780	750	730	740	725	701	---	690
26	---	---	693	---	780	---	730	749	730	707	684	690
27	---	---	720	---	775	755	730	740	720	709	685	691
28	---	---	715	780	775	750	727	737	728	701	675	692
29	---	---	712	762	---	742	720	730	732	700	688	690
30	---	---	688	792	---	730	715	740	725	700	683	691
31	---	---	707	792	---	740	---	740	---	707	685	---
MEAN	---	---	---	---	773	---	---	748	732	---	---	689
MAX	---	---	---	---	787	---	---	760	749	---	---	699
MIN	---	---	---	---	750	---	---	715	719	---	---	680

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	---	---	14.0	12.0	---	13.0	14.0	17.0	19.0	---	23.0
2	25.0	---	---	14.0	13.0	13.0	14.0	14.0	16.0	19.0	---	23.0
3	24.0	---	---	---	12.0	12.0	---	15.0	17.0	19.0	22.0	23.0
4	24.0	---	---	14.0	13.0	13.0	14.0	15.0	16.0	---	23.0	22.0
5	25.0	---	---	15.0	12.0	13.0	14.0	14.0	16.0	21.0	23.0	22.0
6	25.0	---	---	15.0	12.0	15.0	13.0	14.0	16.0	21.0	23.0	22.0
7	23.0	---	---	14.0	11.0	14.0	13.0	14.0	22.0	21.0	23.0	23.0
8	23.0	---	---	14.0	12.0	14.0	13.0	15.0	22.0	22.0	23.0	23.0
9	23.0	---	---	14.0	11.0	12.0	13.5	15.0	20.0	23.0	24.0	23.0
10	23.0	---	---	14.0	11.0	12.0	13.0	15.0	20.0	23.0	22.0	21.0
11	23.0	---	---	14.0	11.0	12.0	13.0	15.0	21.0	23.0	22.0	23.0
12	23.0	---	---	11.0	11.0	12.0	14.0	15.0	21.0	23.0	22.0	21.0
13	---	---	---	11.0	11.0	12.0	15.0	15.0	21.0	22.0	21.0	21.0
14	---	---	---	11.0	11.0	12.0	15.0	15.0	20.0	22.0	---	22.0
15	---	---	---	11.0	11.0	12.0	15.0	15.0	20.0	21.0	21.0	21.0
16	---	---	14.0	12.0	13.0	13.0	16.0	16.0	20.0	21.0	22.0	21.0
17	---	---	15.0	11.0	13.0	13.0	15.0	16.0	19.0	21.0	21.0	21.0
18	---	---	15.0	12.0	14.0	13.0	15.0	15.0	21.0	21.0	22.0	20.0
19	---	---	15.0	13.0	14.0	14.0	15.0	16.0	20.0	21.0	21.0	19.0
20	---	---	15.0	13.0	14.0	14.0	14.0	16.0	19.0	21.0	22.0	22.0
21	---	---	15.0	13.0	14.0	14.0	14.0	16.0	21.0	21.0	22.0	20.0
22	---	---	15.0	13.0	14.0	14.0	14.0	16.0	20.0	21.0	23.0	21.0
23	---	---	15.0	13.0	11.0	12.0	14.0	16.0	21.0	21.0	22.0	21.0
24	---	---	14.0	13.0	11.0	13.0	14.0	16.0	20.0	21.0	22.0	21.0
25	---	---	---	13.0	12.0	13.0	14.0	16.0	19.0	21.0	---	21.0
26	---	---	14.0	---	12.0	---	14.0	17.0	19.0	21.0	22.0	21.0
27	---	---	14.0	---	11.0	13.0	14.0	17.0	19.0	21.0	22.0	21.0
28	---	---	14.0	12.0	12.0	13.0	14.0	16.0	19.0	21.0	22.0	21.0
29	---	---	14.0	12.0	---	12.0	14.0	16.0	19.0	21.5	22.0	21.0
30	---	---	14.0	12.0	---	13.0	14.0	16.0	19.0	21.0	22.0	22.0
31	---	---	14.0	12.0	---	13.0	---	16.0	---	22.0	23.0	---
MEAN	---	---	---	---	12.1	---	---	15.4	19.3	---	---	21.5
MAX	---	---	---	---	14.0	---	---	17.0	22.0	---	---	23.0
MIN	---	---	---	---	11.0	---	---	14.0	16.0	---	---	19.0

09502800 WILLIAMSON VALLEY WASH NEAR PAULDEN, AZ

LOCATION.--Lat 34°52'00", long 112°36'45", in SE¼SE¼ sec.7, T.17 N., R.3 W., Yavapai County, Hydrologic Unit 15060201, on left bank 3.6 mi north of Simmons and 8.5 mi west of Paulden.

DRAINAGE AREA.--255 mi^2.

PERIOD OF RECORD.--March 1965 to September 1985 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 4,455 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1970, at datum 1.00 ft higher. Datum of 4,447 ft published in WRD Ariz. 1971-76 was in error.

REMARKS.--Estimated daily discharges: Oct. 9-31 and Feb. 1-7. Records fair except those above 15 ft^3/s and estimated daily dicharges, which are poor.

AVERAGE DISCHARGE.--20 years, 15.7 ft^3/s, 11,370 acre-ft/yr; median of yearly mean discharges, 6.2 ft^3/s, 4,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft^3/s Sept. 23, 1983, gage height, 9.96 ft from rating curve extended above 2,200 ft^3/s on basis of slope-area measurements at gage heights 6.38 ft, 8.22 ft, 8.93 ft, and 9.96 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	1830	*2,780	*5.88	Feb. 10	0645	557	3.91
Jan. 28	0100	319	3.65	Feb. 14	0015	327	3.66

Minimum daily discharge, 0.62 ft^3/s Aug. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.2	3.9	54	65	17	4.6	4.4	1.5	.77	1.0	1.0
2	2.0	2.3	4.1	25	43	16	4.6	4.2	1.6	.69	1.0	.86
3	1.8	2.3	4.3	17	26	13	4.6	4.2	1.6	.69	.95	.77
4	1.7	2.3	4.3	13	17	9.7	4.5	4.1	1.6	.69	.86	.77
5	1.6	2.4	4.3	10	10	8.7	4.1	4.0	1.5	.69	.86	.77
6	1.5	2.5	4.3	9.3	6.0	7.8	3.9	3.8	1.6	.69	.77	.86
7	1.5	2.5	4.4	8.8	9.0	5.9	3.8	3.6	1.6	.69	.77	.86
8	1.7	2.5	5.4	46	23	4.9	3.5	3.5	1.5	.77	.77	.86
9	1.7	2.5	5.5	124	43	4.9	3.5	3.4	1.6	.77	.77	.86
10	1.7	2.5	5.8	72	415	6.2	3.4	2.9	1.5	.69	.77	.86
11	1.7	2.7	6.1	38	265	8.1	3.2	2.8	1.4	.77	.69	.86
12	1.7	2.7	6.9	26	164	8.5	3.1	2.7	1.4	.77	.69	.77
13	1.8	2.7	25	18	216	6.2	3.1	2.4	1.2	.77	.69	.86
14	1.8	2.9	16	14	202	5.4	3.2	2.1	1.2	2.6	.69	.86
15	1.8	3.1	8.4	11	137	7.3	3.2	1.9	1.1	1.2	.77	.86
16	1.8	3.1	7.2	9.5	107	14	3.3	1.6	1.1	1.0	.77	.77
17	1.8	3.4	8.0	7.8	82	13	3.3	1.5	.97	1.2	.77	.69
18	1.9	3.4	9.2	7.0	65	10	3.5	1.4	.90	1.5	.86	.86
19	1.9	3.8	11	6.7	53	19	3.7	1.4	.79	1.5	.77	.86
20	1.9	3.5	63	6.3	51	55	3.7	1.3	.83	1.5	.86	.86
21	2.0	3.4	44	6.1	77	27	4.7	1.2	.86	1.7	1.0	.86
22	2.0	3.5	8.6	6.1	134	17	5.0	1.2	.85	1.7	.86	.86
23	2.0	4.2	5.5	8.5	71	11	5.4	1.1	.85	1.5	.77	.95
24	2.0	3.9	4.8	21	45	9.1	5.3	1.1	.95	1.5	.69	.95
25	2.0	4.2	4.6	17	36	8.0	4.7	1.2	1.0	1.5	.62	.95
26	2.1	4.4	4.9	36	28	6.0	4.4	1.2	.95	1.5	.62	.95
27	2.1	4.4	1030	120	23	5.0	4.7	1.2	.86	1.3	.69	.95
28	2.1	4.1	1090	177	19	5.2	4.5	1.2	.77	1.3	.77	1.0
29	2.1	4.0	520	130	---	6.5	4.5	1.3	.86	1.7	.69	.95
30	2.2	3.9	200	154	---	5.2	4.5	1.4	.86	1.7	.69	.95
31	2.2	---	106	110	---	4.8	---	1.6	---	1.3	.77	---
TOTAL	58.2	95.3	3225.5	1309.1	2432.0	345.4	121.5	70.9	35.30	36.65	24.25	26.09
MEAN	1.88	3.18	104	42.2	86.9	11.1	4.05	2.29	1.18	1.18	.78	.87
MAX	2.2	4.4	1090	177	415	55	5.4	4.4	1.6	2.6	1.0	1.0
MIN	1.5	2.2	3.9	6.1	6.0	4.8	3.1	1.1	.77	.69	.62	.69
AC-FT	115	189	6400	2600	4820	685	241	141	70	73	48	52

CAL YR 1984 TOTAL 4307.90 MEAN 11.8 MAX 1090 MIN .49 AC-FT 8540
WTR YR 1985 TOTAL 7780.19 MEAN 21.3 MAX 1090 MIN .62 AC-FT 15430

09503700 VERDE RIVER NEAR PAULDEN, AZ

LOCATION.--Lat 34°53'40", long 112°20'32", in SW¼SE¼ sec.39, T.18 N., R.1 W. (revised), Yavapai County, Hydrologic Unit 15060202, in Prescott National Forest, on right bank 0.3 mi upstream from Verde Valley Ranch, 7 mi east of Paulden, 8 mi upstream from Hell Canyon, 8 mi downstream from Granite Creek, and 10 mi downstream from Sullivan Lake.

DRAINAGE AREA.--2,530 mi^2, approximately (includes 373 mi^2 in Aubrey Valley Playa, a closed basin).

PERIOD OF RECORD.--July 1963 to current year.

REVISED RECORDS.--WDR AZ-83-1: 1981.

GAGE.--Water-stage recorder. Elevation of gage is 4,117 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 2-8, 11-27, and Feb. 1-5. Records good except for estimated daily discharges, which are fair. Diversions and storage above station for irrigation and municipal use. Several observations of water temperature and specific conductance were made during the year. Recording rain gage and satellite telemeter at station.

AVERAGE DISCHARGE.--22 years, 44.0 ft^3/s, 31,880 acre-ft/yr; median of yearly mean discharges, 30 ft^3/s, 21,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft^3/s Feb. 20, 1980, gage height, 12.72 ft, from rating curve extended above 7,600 ft^3/s on basis of slope-conveyance and step-backwater analysis, maximum gage height, 12.89 ft Sept. 24, 1983; minimum daily, 15 ft^3/s May 13-23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	0300	2,390	6.64

Minimum daily discharge, 23 ft^3/s Oct. 1 to Nov. 21, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	23	24	74	43	30	30	28	27	26	27	28
2	23	23	25	48	40	29	30	28	27	26	27	27
3	23	23	25	43	38	28	30	27	28	26	26	27
4	23	23	25	35	35	28	30	27	28	26	26	26
5	23	23	25	30	33	28	30	27	28	26	26	27
6	23	23	26	29	31	28	30	27	28	26	26	27
7	23	23	26	29	31	29	29	27	27	26	27	27
8	23	23	28	29	31	29	29	27	27	26	27	27
9	23	23	27	40	31	28	29	28	27	26	27	26
10	23	23	28	61	105	29	28	28	27	27	26	27
11	23	23	29	48	189	29	28	29	27	27	26	26
12	23	23	28	40	110	28	28	28	27	26	26	27
13	23	23	32	32	105	28	28	29	26	26	26	26
14	23	23	30	30	141	29	28	28	26	27	26	26
15	23	23	28	29	102	30	27	28	26	27	26	27
16	23	23	27	29	85	31	28	27	26	27	26	27
17	23	23	27	29	73	30	28	28	26	27	27	27
18	23	23	27	29	72	30	28	28	26	27	28	29
19	23	23	28	29	63	31	28	28	25	28	27	28
20	23	23	28	30	61	31	28	27	25	28	29	28
21	23	23	28	30	67	30	29	28	25	27	27	27
22	23	24	28	30	102	31	28	28	25	27	27	27
23	23	26	28	31	94	30	28	28	25	26	27	27
24	23	24	28	35	63	30	28	28	26	26	27	27
25	23	24	28	44	51	30	28	28	26	27	27	27
26	23	23	29	39	42	30	28	28	26	27	27	27
27	23	24	36	35	34	30	28	28	26	26	27	27
28	23	24	1450	56	31	30	29	28	26	27	27	28
29	23	24	666	73	---	31	28	28	26	27	27	28
30	23	24	266	78	---	29	28	28	26	27	27	28
31	23	---	136	63	---	30	---	27	---	27	28	---
TOTAL	713	700	3266	1257	1903	914	856	861	791	825	830	813
MEAN	23.0	23.3	105	40.5	68.0	29.5	28.5	27.8	26.4	26.6	26.8	27.1
MAX	23	26	1450	78	189	31	30	29	28	28	29	29
MIN	23	23	24	29	31	28	27	27	25	26	26	26
AC-FT	1410	1390	6480	2490	3770	1810	1700	1710	1570	1640	1650	1610

CAL YR	1984	TOTAL	12595	MEAN	34.4	MAX	1450	MIN	22	AC-FT	24980
WTR YR	1985	TOTAL	13729	MEAN	37.6	MAX	1450	MIN	23	AC-FT	27230

09504000 VERDE RIVER NEAR CLARKDALE, AZ

LOCATION.--Lat 34°51'08", long 112°03'55", in NW¼SE¼ sec.17, T.17 N., R.3 E., Yavapai County, Hydrologic Unit 15060202, in Prescott National Forest, on left bank 1.7 mi downstream from Sycamore Creek and 5.6 mi north of Clarkdale.

DRAINAGE AREA.--3,520 mi^2, approximately (includes 373 mi^2 in Aubrey Valley Playa, a closed basin).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to October 1916, May 1917 to July 1921, April 1965 to current year.

REVISED RECORDS.--WSP 1213: 1917, 1920.

GAGE.--Water-stage recorder. Elevation of gage is 3,500 ft above National Geodetic Vertical Datum of 1929. June 1915 to June 1921 at site 2.5 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1-11, Jan. 19, Sept. 4-15, 21-25. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--24 years (water years 1916, 1918-20, 1966-85), 202 ft^3/s, 146,300 acre-ft/yr; median of yearly mean discharges, 170 ft^3/s, 123,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,600 ft^3/s Feb. 21, 1920, gage height, 19.1 ft, site and datum then in use, from rating curve extended above 2,500 ft^3/s on basis of float-area measurement at 35,000 ft^3/s; minimum daily, 55 ft^3/s Aug. 31, Sept. 1, 1920.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	0715	*4,760	*6.56
Mar. 10	2330	2,760	4.78

Minimum daily discharge, 81 ft^3/s June 28 to July 6, 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	87	90	308	149	519	129	155	87	81	95	115
2	88	87	89	192	118	575	123	116	87	81	93	97
3	88	87	90	138	112	420	116	100	87	81	93	95
4	88	87	90	116	101	271	107	95	87	81	93	95
5	88	85	89	103	96	204	102	93	87	81	93	94
6	88	87	89	99	97	180	99	93	87	81	91	94
7	88	87	89	98	94	183	96	92	87	83	91	94
8	88	87	94	106	93	202	93	93	85	83	101	93
9	88	87	93	283	95	243	91	93	85	83	93	93
10	88	87	93	156	121	1170	91	94	85	81	91	93
11	88	87	98	149	318	2270	90	93	85	81	91	93
12	87	87	98	123	266	1400	89	94	85	81	91	92
13	85	87	112	109	245	837	88	94	85	81	91	92
14	87	87	106	99	414	622	88	93	83	81	91	92
15	87	87	98	95	521	629	87	91	83	83	91	91
16	85	87	96	92	570	791	86	89	83	97	91	91
17	87	87	94	93	631	658	86	92	83	119	91	89
18	87	87	93	93	609	564	86	92	83	93	91	101
19	87	87	93	93	521	545	87	91	83	89	91	95
20	87	87	101	96	586	509	86	90	83	97	93	93
21	87	87	119	100	560	477	102	90	83	97	95	92
22	87	89	103	101	582	428	713	90	83	95	95	91
23	87	99	96	121	603	334	473	90	83	93	93	91
24	87	93	94	193	413	257	227	90	83	93	91	90
25	87	95	93	250	293	244	141	89	85	93	89	89
26	87	91	95	196	300	235	117	88	83	93	89	89
27	87	89	1120	302	360	197	105	88	83	95	89	89
28	87	89	3710	323	424	158	213	87	81	95	89	89
29	87	90	2460	280	---	145	407	88	81	97	89	89
30	87	89	871	266	---	159	272	88	81	111	89	89
31	87	---	518	225	---	134	---	88	---	97	125	---
TOTAL	2704	2649	11174	4998	9292	15560	4690	2919	2526	2777	2879	2790
MEAN	87.2	88.3	360	161	332	502	156	94.2	84.2	89.6	92.9	93.0
MAX	88	99	3710	323	631	2270	713	155	87	119	125	115
MIN	85	85	89	92	93	134	86	87	81	81	89	89
AC-FT	5360	5250	22160	9910	18430	30860	9300	5790	5010	5510	5710	5530

CAL YR 1984 TOTAL 41812 MEAN 114 MAX 3710 MIN 73 AC-FT 82930
WTR YR 1985 TOTAL 64958 MEAN 178 MAX 3710 MIN 81 AC-FT 128800

09504430 OAK CREEK AT SEDONA, AZ

LOCATION.--Lat 34 51'42", long 111 45'40", in NE¼NE¼NE¼ sec.18, T.17 N., R.6 E., Coconino County, Hydrologic Unit 15060202, on left bank 290 ft downstream from State Highway 179 bridge, 28 mi southwest of Flagstaff, and 35.1 mi upstream from mouth.

DRAINAGE AREA.--233 mi^2.

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 4,169.20 ft above National Geodetic Vertical Datum of 1929 (Arizona Department of Transportation bench mark).

REMARKS.--No estimated daily discharge. Records good. Many diversions above and below station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,700 ft^3/s Mar. 12, 1982, gage height, 15.64 ft from outside floodmark, from rating curve extended above 5,000 ft^3/s on the basis of slope-conveyance study; minimum daily, 20 ft^3/s June 8, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	1845	*3,380	*7.98	Apr. 22	1745	1,970	6.78
Mar. 11	2215	2,150	6.96	Apr. 29	0015	1,050	5.68

Minimum daily discharge, 21 ft^3/s July 6, Aug. 28, Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	34	30	118	47	431	159	141	23	22	27	22
2	32	34	30	77	38	374	124	99	23	22	27	22
3	47	34	30	61	37	208	132	79	25	23	36	21
4	35	33	30	52	36	133	127	67	25	22	28	24
5	33	33	31	47	33	121	110	58	25	22	25	24
6	32	33	31	43	32	131	96	50	25	21	25	25
7	32	33	35	42	31	113	84	45	24	22	25	29
8	31	33	32	93	32	390	75	54	24	24	26	30
9	31	33	32	53	34	185	68	35	23	23	30	29
10	31	33	101	44	54	1100	59	34	23	23	25	32
11	31	33	105	41	39	1340	50	32	22	23	24	36
12	32	34	107	39	41	1110	46	31	22	22	24	30
13	32	34	93	37	81	525	43	30	22	23	24	28
14	32	33	69	37	143	433	40	30	22	23	24	27
15	32	33	54	38	180	372	39	30	23	26	24	32
16	32	33	46	36	236	363	37	28	22	24	23	27
17	32	33	43	37	275	348	36	27	22	30	23	24
18	32	32	43	37	282	339	35	26	22	29	23	43
19	32	32	50	48	286	474	35	26	24	26	22	29
20	33	31	179	71	300	408	35	25	22	27	24	23
21	34	31	111	78	316	367	266	25	23	29	25	28
22	33	31	70	79	303	294	1640	24	23	25	24	28
23	33	42	51	146	229	232	767	25	23	24	22	28
24	33	32	42	140	156	227	380	25	22	24	22	28
25	34	45	38	111	160	250	216	25	23	23	22	29
26	34	33	41	135	109	238	158	25	23	25	22	28
27	34	30	1470	144	241	182	162	25	22	26	22	28
28	34	30	2020	110	296	141	671	24	23	26	21	29
29	33	30	729	91	---	177	645	24	23	28	22	29
30	34	30	298	79	---	140	247	23	23	33	23	30
31	34	---	177	55	---	154	---	24	---	27	23	---
TOTAL	1026	995	6218	2219	4137	11300	6582	1216	691	767	755	842
MEAN	33.1	33.2	201	71.6	148	365	219	39.2	23.0	24.7	24.4	28.1
MAX	47	45	2020	146	316	1340	1640	141	25	33	36	43
MIN	31	30	30	36	31	113	35	23	22	21	21	21
AC-FT	2040	1970	12330	4400	8210	22410	13060	2410	1370	1520	1500	1670

CAL YR 1984 TOTAL 18212 MEAN 49.8 MAX 2020 MIN 27 AC-FT 36120
WTR YR 1985 TOTAL 36748 MEAN 101 MAX 2020 MIN 21 AC-FT 72890

09504500 OAK CREEK NEAR CORNVILLE, AZ

LOCATION.--Lat 34 45'52", long 111 53'25", in NW¼SW¼ sec.23, T.16 N., R.4 E., Yavapai County, Hydrologic Unit 15060202, on right bank 250 ft downstream from county highway bridge, 0.2 mi upstream from Page Springs, 4 mi northeast of Cornville, and 15 mi upstream from mouth. Prior to March 18, 1981, at site 250 ft upstream.

DRAINAGE AREA.--357 mi^2.

PERIOD OF RECORD.--July 1940 to September 1945, April 1948 to current year.

REVISED RECORDS.--WSP 1149: 1948(M). WRD Ariz. 1974: 1973.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 3,470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to March 10, 1981, at site 250 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 28 to Dec. 10, Dec. 27 to Jan. 15, and Sept. 6-24. Records good except for estimated daily discharges, which are fair. Numerous diversions above and below station for irrigation.

AVERAGE DISCHARGE.--42 years, 91.0 ft^3/s, 65,930 acre-ft/yr; median of yearly mean discharges, 75 ft^3/s, 54,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft^3/s Feb. 19, 1980, gage height, 16.30 ft, maximum gage height, 16.48 ft, Sept. 5, 1970; minimum discharge, 6 ft^3/s July 27, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, 23 ft in March 1938, from floodmarks (upstream side of bridge).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	unknown	*3,070	*7.13	Apr. 22	0300	2,030	6.16
Mar. 12	0200	1,960	6.09				

Minimum daily discharge, 17 ft^3/s July 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	26	30	100	55	413	182	145	25	19	27	36
2	24	26	30	80	50	417	142	84	25	19	26	23
3	38	26	30	60	52	267	143	61	25	18	25	23
4	35	28	30	50	49	172	143	53	26	18	33	22
5	26	29	30	45	46	140	124	46	26	18	26	22
6	25	29	30	42	44	146	102	40	25	18	24	22
7	25	29	30	40	43	141	88	39	25	17	23	28
8	25	29	30	100	43	136	72	36	24	18	23	30
9	24	30	30	70	44	158	63	33	23	19	24	29
10	23	29	30	50	115	743	57	34	22	19	24	33
11	23	29	54	40	79	1130	52	33	22	19	22	36
12	23	29	103	40	54	1230	48	33	22	19	21	32
13	23	29	211	40	60	589	44	33	21	18	21	28
14	24	29	107	40	151	461	41	32	21	18	21	27
15	24	29	69	40	193	427	35	32	21	18	21	31
16	25	29	60	40	245	382	33	31	21	21	20	28
17	26	30	51	38	296	429	31	30	21	21	20	24
18	26	29	48	38	317	369	31	30	20	24	21	45
19	26	29	53	39	290	431	32	30	19	25	22	30
20	26	29	154	52	323	433	31	28	19	24	21	25
21	26	29	177	66	360	421	52	28	20	26	21	25
22	26	29	99	69	372	323	1380	27	19	26	23	25
23	26	40	70	96	306	258	725	25	19	23	22	25
24	27	36	54	173	219	230	328	24	21	23	21	25
25	26	43	45	128	187	250	188	24	21	22	20	26
26	26	40	47	116	209	245	119	24	21	22	19	25
27	26	33	1500	182	252	199	100	24	18	22	20	24
28	26	30	2000	147	293	148	398	25	19	26	19	25
29	27	30	700	107	---	175	614	26	19	27	36	26
30	26	30	300	88	---	168	280	24	20	40	24	25
31	26	---	170	69	---	180	---	25	---	32	48	---
TOTAL	803	912	6372	2285	4747	11211	5678	1159	650	679	738	825
MEAN	25.9	30.4	206	73.7	170	362	189	37.4	21.7	21.9	23.8	27.5
MAX	38	43	2000	182	372	1230	1380	145	26	40	48	45
MIN	23	26	30	38	43	136	31	24	18	17	19	22
AC-FT	1590	1810	12640	4530	9420	22240	11260	2300	1290	1350	1460	1640

CAL YR 1984 TOTAL 15895 MEAN 43.4 MAX 2000 MIN 12 AC-FT 31530
WTR YR 1985 TOTAL 36059 MEAN 98.8 MAX 2000 MIN 17 AC-FT 71520

09505260 MONTEZUMA WELL OUTLET NEAR RIMROCK, AZ

LOCATION.--Lat 34°38'53", long 111°45'02", in NE¼, sec.31, T.15 N., R.6 E., Yavapai County, Hydrologic Unit 15060202, in Montezuma Castle National Monument, on left bank 100 ft downstream from outlet of Montezuma Well, and 2.5 mi northeast of Rimrock.

PERIOD OF RECORD.--1948-59, 1961, 1976 (three or less discharge measurements each year); April 1977 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Elevation of gage is 3,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records excellent. No diversions between outlet and gage since June 1977 when gate was removed.

AVERAGE DISCHARGE.--8 years (water years 1978-85), 2.27 ft^3/s, 1,640 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3.2 ft^3/s Apr. 4, 8-20, July 17-23, 26-31, Aug. 6, 7, 13-16, 21, 1979; minimum daily, 1.0 ft^3/s Sept. 21-24, 1984, Sept. 13, 17, 19-30, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2.4 ft^3/s Mar. 14-19; minimum daily, 1.0 ft^3/s Sept. 13, 17, 19-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.4	1.4	1.5	1.6	1.8	2.1	2.0	2.0	1.9	1.9	1.3
2	1.6	1.4	1.4	1.3	1.6	1.8	2.2	1.9	2.0	1.9	1.9	1.3
3	1.6	1.4	1.4	1.3	1.6	1.8	2.2	2.0	2.0	1.9	1.9	1.3
4	1.6	1.4	1.4	1.3	1.6	1.8	2.2	2.0	2.0	1.9	1.8	1.3
5	1.6	1.4	1.5	1.4	1.6	1.9	2.2	2.0	2.0	1.9	1.8	1.3
6	1.6	1.4	1.4	1.5	1.6	2.3	2.2	2.0	2.0	1.9	1.8	1.2
7	1.6	1.4	1.4	1.6	1.6	2.3	2.2	2.0	2.0	1.9	1.8	1.2
8	1.6	1.4	1.4	1.6	1.6	2.3	2.2	2.0	2.0	1.9	1.8	1.2
9	1.6	1.4	1.4	1.6	1.7	2.3	2.2	2.0	2.0	1.9	1.7	1.2
10	1.6	1.4	1.5	1.6	1.7	2.3	2.2	2.0	2.0	1.9	1.7	1.2
11	1.6	1.4	1.6	1.6	1.7	2.3	2.2	2.0	2.0	1.9	1.7	1.1
12	1.6	1.4	1.5	1.6	1.7	2.3	2.2	2.0	2.0	1.9	1.7	1.1
13	1.6	1.4	1.6	1.6	1.7	2.3	2.2	2.0	2.0	1.9	1.6	1.0
14	1.6	1.4	1.5	1.6	1.7	2.4	2.2	2.0	2.0	1.9	1.6	1.1
15	1.6	1.4	1.5	1.6	1.7	2.4	2.2	2.0	2.0	1.9	1.6	1.1
16	1.6	1.4	1.4	1.5	1.8	2.4	2.2	2.0	2.0	1.9	1.6	1.1
17	1.6	1.4	1.4	1.5	1.8	2.4	2.2	2.0	2.0	1.9	1.6	1.0
18	1.6	1.4	1.5	1.6	1.8	2.4	2.2	2.0	2.0	1.9	1.6	1.1
19	1.6	1.4	1.5	1.6	1.8	2.4	2.2	2.0	2.0	1.9	1.5	1.0
20	1.6	1.4	1.4	1.6	1.8	2.3	2.2	2.0	2.0	1.9	1.5	1.0
21	1.6	1.4	1.4	1.6	1.8	2.3	2.2	2.0	2.0	1.9	1.4	1.0
22	1.5	1.4	1.4	1.6	1.8	2.3	2.2	2.0	1.9	1.9	1.4	1.0
23	1.5	1.5	1.4	1.6	1.8	2.3	2.2	2.0	1.9	1.9	1.4	1.0
24	1.5	1.5	1.4	1.6	1.8	2.3	2.1	2.0	1.9	1.9	1.4	1.0
25	1.5	1.4	1.4	1.6	1.8	2.3	2.1	2.0	1.9	1.9	1.4	1.0
26	1.5	1.4	1.4	1.5	1.8	2.3	2.1	2.0	1.9	1.9	1.4	1.0
27	1.4	1.4	1.6	1.6	1.8	2.3	2.1	2.0	1.9	1.9	1.4	1.0
28	1.4	1.4	1.4	1.6	1.8	2.3	2.1	2.0	1.9	1.9	1.4	1.0
29	1.4	1.4	1.4	1.6	---	2.3	2.0	2.0	1.8	1.9	1.4	1.0
30	1.4	1.4	1.4	1.6	---	2.2	2.0	2.0	1.9	1.9	1.3	1.0
31	1.4	---	1.4	1.6	---	2.1	---	2.0	---	1.9	1.3	---
TOTAL	48.1	42.2	44.7	48.0	48.1	69.2	65.0	61.9	59.0	58.9	49.3	33.1
MEAN	1.55	1.41	1.44	1.55	1.72	2.23	2.17	2.00	1.97	1.90	1.59	1.10
MAX	1.6	1.5	1.6	1.6	1.8	2.4	2.2	2.0	2.0	1.9	1.9	1.3
MIN	1.4	1.4	1.4	1.3	1.6	1.8	2.0	1.9	1.8	1.9	1.3	1.0
AC-FT	95	84	89	95	95	137	129	123	117	117	98	66

CAL YR 1984 TOTAL 704.3 MEAN 1.92 MAX 3.0 MIN 1.0 AC-FT 1400
WTR YR 1985 TOTAL 627.5 MEAN 1.72 MAX 2.4 MIN 1.0 AC-FT 1240

09505350 DRY BEAVER CREEK NEAR RIMROCK, AZ

LOCATION.--Lat 34°43'43", long 111°46'30", in NE¼NW¼ sec.1, T.15 N., R.5 E., Yavapai County, Hydrologic Unit 15060202, in Coconino National Forest, on left upstream abutment of abandoned highway bridge, 400 ft upstream from present State Highway 179 and 5.5 mi north of Rimrock.

DRAINAGE AREA.--142 mi^2.

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WRD Ariz. 1969: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,694.38 ft above National Geodetic Vertical Datum of 1929 (Arizona Highway Department bench mark).

REMARKS.--Estimated daily discharges: Sept. 2-10, 13-17, 21-30. Records fair. No known diversions above station.

AVERAGE DISCHARGE.--25 years, 49.1 ft^3/s, 35,570 acre-ft/yr; median of yearly mean discharges, 36 ft^3/s, 26,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,600 ft^3/s Sept. 5, 1970, gage height, 14.35 ft, from rating curve extended above 6,000 ft^3/s on basis of computation of peak flow over weir at gage height 9.07 ft and 9.69 ft and slope-area measurement at gage height 14.35 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	1730	*4,250	*7.13	Apr. 22	2145	644	4.33
Mar. 11	2215	2,620	6.09	Apr. 28	0800	644	4.33

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	66	14	284	167	35	.00	.00	.00	.27
2	.00	.00	.00	36	13	238	155	17	.00	.00	.00	.00
3	5.4	.00	.00	19	10	135	171	10	.00	.00	.00	.00
4	.22	.00	.00	15	8.5	74	152	6.3	.00	.00	.00	.00
5	.01	.00	.00	11	6.9	71	119	3.9	.00	.00	.00	.00
6	.00	.00	.00	8.6	5.0	100	91	2.0	.00	.00	.00	.00
7	.00	.00	.00	7.1	4.2	105	66	.84	.00	.00	.00	.00
8	.00	.00	.00	38	3.4	78	47	.31	.00	.00	.00	.00
9	.00	.00	.00	36	3.5	107	33	.14	.00	.00	.00	.00
10	.00	.00	.00	14	13	617	24	.08	.00	.00	.00	.00
11	.00	.00	.00	8.6	17	1090	17	.06	.00	.00	.00	.68
12	.00	.00	.00	6.4	19	980	12	.05	.00	.00	.00	.04
13	.00	.00	30	5.4	148	364	8.2	.05	.00	.00	.00	.00
14	.00	.00	67	4.3	211	255	5.4	.04	.00	.00	.00	.00
15	.00	.00	38	3.2	241	233	3.6	.03	.00	.00	.00	.00
16	.00	.00	21	2.2	271	375	2.1	.03	.00	.00	.00	.00
17	.00	.00	14	1.4	267	352	1.0	.02	.00	.00	.00	.00
18	.00	.00	21	1.2	231	246	.47	.02	.00	.00	.00	.82
19	.00	.00	46	.83	197	467	.22	.02	.00	.00	.00	1.7
20	.00	.00	199	5.1	217	292	.12	.01	.00	.00	.00	.04
21	.00	.00	94	20	281	261	59	.01	.00	.00	.00	.00
22	.00	.00	35	26	282	200	394	.01	.00	.00	.00	.00
23	.00	.00	14	80	192	169	268	.00	.00	.00	.00	.00
24	.00	.00	7.1	116	106	171	88	.00	.00	.00	.00	.00
25	.00	.00	5.0	69	91	200	40	.00	.00	.00	.00	.00
26	.00	.00	4.0	112	111	195	19	.00	.00	.00	.00	.00
27	.00	.00	1290	174	141	143	15	.00	.00	.00	.00	.00
28	.00	.00	1400	96	169	116	323	.00	.00	.00	.00	.00
29	.00	.00	561	81	---	90	249	.00	.00	1.2	.00	.00
30	.00	.00	202	69	---	60	83	.00	.00	.69	.00	.00
31	.00	---	103	31	---	124	---	.00	---	.00	.68	---
TOTAL	5.63	.00	4151.10	1163.33	3273.5	8192	2613.11	75.92	.00	1.89	.68	3.55
MEAN	.18	.000	134	37.5	117	264	87.1	2.45	.000	.061	.022	.12
MAX	5.4	.00	1400	174	282	1090	394	35	.00	1.2	.68	1.7
MIN	.00	.00	.00	.83	3.4	60	.12	.00	.00	.00	.00	.00
AC-FT	11	.00	8230	2310	6490	16250	5180	151	.00	3.7	1.3	7.0

CAL YR 1984 TOTAL 4567.53 MEAN 12.5 MAX 1400 MIN .00 AC-FT 9060
WTR YR 1985 TOTAL 19480.71 MEAN 53.4 MAX 1400 MIN .00 AC-FT 38640

09505800 WEST CLEAR CREEK NEAR CAMP VERDE, AZ

LOCATION.--Lat 34°32'19", long 111°41'36", in NW¼NW¼ sec.11, T.13 N., R.6 E., Yavapai County, Hydrologic Unit 15060203, in Coconino National Forest, on left bank at Bull Pen Ranch, 11 mi upstream from mouth, and 9 mi east of Camp Verde.

DRAINAGE AREA.--241 mi^2.

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,630 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 14-16, 29, 30, Dec. 13-18, 27, 28. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--20 years, 71.9 ft^3/s, 52,090 acre-ft/yr; median of yearly mean discharges, 58 ft^3/s, 42,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft^3/s Dec. 18, 1978, gage height, 11.6 ft, from floodmarks and rating curve extended above 2,700 ft^3/s, on basis of slope-area measurements at gage heights 8.3 ft and 10.15 ft, minimum daily, 12 ft^3/s at times during some months in 1966, 1968-70, 1974, 1977, 1980, 1981, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*), from rating curve extended above 2,700 ft^3/s as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	unknown	*5,140	7.86	Mar. 16	1800	1,637	6.06
Mar. 12	0430	3,261	7.04				

Minimum daily discharge, 14 ft^3/s Aug. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	17	20	146	34	328	211	56	17	15	21	16
2	18	17	19	83	31	329	202	45	17	15	20	16
3	46	17	19	52	32	205	138	37	17	15	18	16
4	32	17	20	48	29	123	119	32	17	15	18	16
5	20	17	20	43	24	91	94	29	17	15	18	15
6	18	17	20	39	23	80	82	27	17	15	18	16
7	20	17	21	37	23	91	79	26	17	16	17	17
8	21	17	22	34	23	86	72	25	16	17	18	17
9	18	18	24	34	23	73	65	24	15	17	18	18
10	18	18	25	32	26	146	53	23	15	17	17	17
11	18	18	69	28	31	951	48	23	15	19	16	27
12	17	18	140	24	37	1990	47	23	15	19	16	40
13	17	18	250	24	162	525	44	24	15	19	16	30
14	17	18	150	24	102	248	40	24	15	18	15	22
15	17	18	90	24	140	254	38	23	15	18	16	19
16	16	18	70	23	135	584	36	22	15	20	15	18
17	17	18	60	22	204	548	34	21	15	20	15	18
18	18	18	54	22	317	815	34	21	15	20	16	21
19	18	18	77	21	279	486	35	21	15	19	16	30
20	18	18	198	21	245	362	33	20	15	20	17	30
21	18	18	104	21	296	251	38	20	15	19	18	25
22	18	18	47	21	349	186	57	20	15	20	17	21
23	18	24	38	21	303	146	45	19	15	18	16	19
24	18	23	34	22	175	122	58	18	15	18	15	18
25	18	26	30	23	116	122	53	18	16	18	15	18
26	18	25	27	35	131	124	46	18	16	18	15	18
27	18	23	1820	95	171	114	42	18	16	18	14	18
28	18	22	2480	78	204	96	42	17	15	20	14	18
29	18	21	1070	97	---	92	45	17	15	24	15	18
30	18	21	389	81	---	92	57	17	15	26	16	18
31	17	---	221	45	---	110	---	18	---	23	16	---
TOTAL	599	573	7628	1320	3665	9770	1987	746	468	571	512	610
MEAN	19.3	19.1	246	42.6	131	315	66.2	24.1	15.6	18.4	16.5	20.3
MAX	46	26	2480	146	349	1990	211	56	17	26	21	40
MIN	16	17	19	21	23	73	33	17	15	15	14	15
AC-FT	1190	1140	15130	2620	7270	19380	3940	1480	928	1130	1020	1210

CAL YR	1984	TOTAL	16078	MEAN	43.9	MAX	2480	MIN	16	AC-FT	31890
WTR YR	1985	TOTAL	28449	MEAN	77.9	MAX	2480	MIN	14	AC-FT	56430

09507500 FOSSIL CREEK DIVERSIONS TO CHILDS POWERPLANT, NEAR CAMP VERDE, AZ

LOCATION.--Lat 34°22'06", long 111°39'56", in NE¼SW¼ sec.20, T.11 N., R.7 E., Yavapai County, Hydrologic Unit 15060203, at head of Stehr Lake, 2.3 mi northeast of Childs powerplant, 4.4 mi by flume downstream from Irving powerplant, and 17 mi southeast of Camp Verde.

PERIOD OF RECORD.--January 1952 to current year.

GAGE.--Water-stage recorder and weir in concrete flume. Datum of gage is 3,716.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 3 to Mar. 2, May 31 to June 24. Records excellent except for periods of estimated record, which are good. Record is obtained at the head of Stehr Lake, a regulatory basin, and shows the water used by Childs powerplant. Most of the flow originates at Fossil Springs, which are fairly constant. Diversion is made from Fossil Creek 8 mi upstream from this station and is first used by Irving powerplant. A second diversion from Fossil Creek enters the flume below Irving powerplant. Based on estimates and records for previous years, the flow through the Irving powerplant is estimated to be about 99 percent of the record published herewith.

AVERAGE DISCHARGE.--33 years, 43.2 ft^3/s, 31,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 58 ft^3/s Aug. 1, 2, 1982; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	45	46	45	45	45	45	49	45	48	47	48
2	46	45	46	45	45	45	45	49	45	48	47	49
3	45	45	43	45	45	47	45	49	45	47	47	48
4	45	45	46	45	45	46	45	47	45	48	49	48
5	45	43	46	45	45	43	46	49	45	49	51	48
6	45	46	46	45	45	45	45	45	45	50	49	48
7	45	46	46	45	45	46	46	9.2	45	50	48	48
8	45	46	46	45	41	45	46	38	45	47	48	48
9	45	46	46	45	45	46	45	47	45	48	48	48
10	45	46	46	45	45	46	44	47	45	48	48	48
11	45	46	46	45	45	46	45	46	45	47	48	47
12	45	46	46	43	45	44	46	46	45	47	48	48
13	45	46	43	45	45	44	46	46	45	47	47	49
14	45	46	45	45	45	46	45	45	45	47	48	49
15	45	46	45	45	45	46	45	44	45	46	47	49
16	45	46	45	45	45	46	44	44	45	46	48	49
17	45	46	45	45	45	45	45	47	45	48	48	49
18	45	46	45	45	45	46	43	47	45	48	48	49
19	45	46	45	45	45	46	44	46	45	47	47	48
20	45	46	45	45	45	45	45	46	45	47	48	48
21	45	46	45	45	45	46	45	46	45	47	48	48
22	45	46	45	45	45	45	45	46	45	47	47	48
23	45	46	45	45	45	46	43	46	45	47	47	48
24	45	46	45	45	45	46	39	47	45	47	47	48
25	45	46	45	45	45	46	42	47	41	47	47	48
26	45	46	45	45	45	46	49	46	47	47	48	48
27	45	46	45	45	45	45	49	47	47	48	48	48
28	45	46	45	45	45	46	49	47	47	48	48	48
29	45	46	45	45	---	46	46	47	47	48	48	48
30	45	46	45	45	---	45	48	47	47	48	48	48
31	45	---	45	45	---	46	---	45	---	47	48	---
TOTAL	1397	1373	1402	1393	1256	1411	1355	1397.2	1356	1474	1483	1446
MEAN	45.1	45.8	45.2	44.9	44.9	45.5	45.2	45.1	45.2	47.5	47.8	48.2
MAX	46	46	46	45	45	47	49	49	47	50	51	49
MIN	45	43	43	43	41	43	39	9.2	41	46	47	47
AC-FT	2770	2720	2780	2760	2490	2800	2690	2770	2690	2920	2940	2870

CAL YR 1984 TOTAL 16217.0 MEAN 44.3 MAX 49 MIN .00 AC-FT 32170
WTR YR 1985 TOTAL 16743.2 MEAN 45.9 MAX 51 MIN 9.2 AC-FT 33210

09507580 EAST VERDE RIVER DIVERSION FROM CLEAR CREEK, NEAR PINE, AZ

LOCATION.--Lat 34°25'04", long 111°15'47" (revised), in NW¼NE¼ sec.23, T.12 N., R.10 E. (unsurveyed), Gila County, Hydrologic Unit 15060203, on East Verde River at mouth of Mail Creek, 0.9 mi southeast of Washington Park, and 11 mi east of Pine.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and weir in concrete flume. Datum of gage is 5,774 ft above National Geodetic Vertical Datum of 1929, (Phelps Dodge Corporation reference mark).

REMARKS.--No estimated daily discharges. Records excellent. Diversion is 9.5 mi northeast from Blue Ridge Reservoir, on East Clear Creek, in the Little Colorado River basin, to the East Verde River in the Gila River basin.

AVERAGE DISCHARGE.--19 years (water years 1967-85) 13.5 ft^3/s, 9,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 34 ft^3/s Apr. 19, 29, May 5-7, 10, 12, 15, 18, June 2, 1969; no flow for long periods each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	.00	.00	.00	.00	.00	.00	.00	.00	12	12	12
2	7.9	.00	.00	.00	.00	.00	.00	.00	.00	12	7.6	12
3	11	.00	.00	.00	.00	.00	.00	.00	.00	12	6.6	13
4	13	.00	.00	.00	.00	.00	.00	.00	.00	12	12	7.7
5	13	.00	.00	.00	.00	.00	.00	.00	.00	12	12	10
6	13	.00	.00	.00	.00	.00	.00	.00	.00	12	12	12
7	13	.00	.00	.00	.00	.00	.00	.00	.00	12	12	16
8	13	.17	.00	.00	.00	.00	.00	.00	.00	12	12	16
9	8.5	.00	.00	.00	.00	.00	.00	.00	.00	12	12	9.0
10	6.3	.00	.00	.00	.00	.00	.00	.00	.00	12	12	1.4
11	13	.00	.00	.00	.00	.00	.00	.00	.00	3.3	12	3.1
12	11	.00	.00	.00	.00	.00	.00	.00	.00	4.5	12	9.5
13	13	.00	.00	.00	.00	.00	.00	.00	.00	9.3	12	16
14	13	.00	.00	.00	.00	.00	.00	.00	.00	6.6	12	15
15	13	.00	.00	.00	.00	.00	.00	.00	.00	6.3	12	14
16	13	.00	.00	.00	.00	.00	.00	.00	.00	12	12	14
17	12	.00	.00	.00	.00	.00	.00	.00	.00	12	12	15
18	13	.00	.00	.00	.00	.00	.00	.00	6.0	12	12	17
19	13	.00	.00	.00	.00	.00	.00	.00	12	12	12	14
20	13	.00	.00	.00	.00	.00	.00	.00	12	12	12	12
21	13	.00	.00	.00	.00	.00	.00	.00	12	12	12	14
22	13	.00	.00	.00	.00	.00	.00	.00	12	7.2	12	14
23	13	.00	.00	.00	.00	.00	.00	.00	12	.86	12	14
24	13	.00	.00	.00	.00	.00	.00	.00	12	4.1	12	14
25	13	.00	.00	.00	.00	.00	.00	.00	12	12	12	14
26	13	.64	.00	.00	.00	.00	.00	.00	12	12	12	16
27	13	.00	.00	.00	.00	.00	.00	.00	12	12	12	16
28	13	.00	.00	.00	.00	.00	.00	.00	12	12	7.4	14
29	12	.00	.00	.00	---	.00	.00	.00	12	12	6.4	14
30	13	.00	.00	.00	---	.00	.00	.00	12	12	12	14
31	7.8	---	.00	.00	---	.00	---	.00	---	12	12	---
TOTAL	365.1	.81	.00	.00	.00	.00	.00	.00	150.00	318.16	352.0	382.7
MEAN	11.8	.027	.000	.000	.000	.000	.000	.000	5.00	10.3	11.4	12.8
MAX	13	.64	.00	.00	.00	.00	.00	.00	12	12	12	17
MIN	2.6	.00	.00	.00	.00	.00	.00	.00	.00	.86	6.4	1.4
AC-FT	724	1.6	.00	.00	.00	.00	.00	.00	298	631	698	759

CAL YR 1984 TOTAL 5369.13 MEAN 14.7 MAX 29 MIN .00 AC-FT 10650
WTR YR 1985 TOTAL 1568.77 MEAN 4.30 MAX 17 MIN .00 AC-FT 3110

09507980 EAST VERDE RIVER NEAR CHILDS, AZ

LOCATION.--Lat 34°17'00", long 111°38'50", in sec.21, T.11 N., R.7 E. (unsurveyed), Gila County Hydrologic Unit 15060203, in Tonto National Forest, on left bank 1.3 mi upstream from mouth and 6 mi southeast of Childs.

DRAINAGE AREA.--328 mi^2.

PERIOD OF RECORD.--September 1961 to December 1965, May 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,500 ft above National Geodetic Vertical Datum (NGVD) of 1929, from topographic map. Sept. 1, 1961, to Dec. 15, 1965, at site 1 mi upstream at elevation of 2,600 ft above NGVD of 1929, datum raised 0.38 ft Oct. 4, 1963. May 25, 1967, to July 20, 1972, at present site at datum 1.29 ft higher.

REMARKS.--No estimated daily discharges. Records good. Since September 30, 1965, records include transbasin diversions from east Clear Creek to headwaters of East Verde River. (See sta 09507580 and 09398300.)

AVERAGE DISCHARGE.--18 years (water years 1968-85), 76.9 ft^3/s, 56,220 acre-ft/yr; median of yearly mean discharges, 66 ft^3/s, 47,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft^3/s Sept. 5, 1970, gage height, 20.5 ft, present datum, from profile past gage, from rating curve extended above 960 ft^3/s on basis of slope-area measurements at gage heights 10.11 and 20.5 ft, present datum; minimum daily, 0.20 ft^3/s June 19 to July 8, 1963, July 21-28, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*), from rating curve extended above 960 ft^3/s as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 11	2045	691	3.43	Dec. 28	2000	2,730	6.39
Dec. 13	0800	1,130	4.24	Jan. 8	2030	715	3.43
Dec. 20	0800	1,380	4.63	Mar. 16	2130	909	3.85
Dec. 27	1915	*5,570	*9.11	Sept. 11	1345	696	3.38

Minimum daily discharge, 5.3 ft^3/s June 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	24	20	185	105	92	105	42	15	11	30	24
2	7.3	23	17	142	79	96	104	38	14	11	30	23
3	17	16	15	112	76	93	100	35	13	12	25	20
4	90	12	14	93	76	82	99	37	13	12	25	19
5	51	10	12	77	69	72	96	35	13	13	17	16
6	34	9.0	11	66	64	66	90	32	13	12	19	15
7	25	9.3	8.9	57	65	61	84	29	13	11	19	23
8	22	8.6	12	313	71	57	78	27	12	11	19	20
9	21	8.6	24	298	102	54	74	26	11	13	18	18
10	19	8.5	33	139	151	56	70	25	10	15	17	17
11	20	8.8	139	98	183	87	63	25	10	17	16	146
12	15	8.9	376	80	132	284	57	25	9.1	20	17	85
13	27	8.8	740	67	208	240	52	27	7.7	17	16	34
14	24	10	339	57	256	148	48	24	7.2	13	16	19
15	23	10	181	51	180	208	45	22	7.0	17	15	17
16	25	10	124	46	153	622	41	21	7.7	28	15	18
17	27	10	116	43	143	556	40	21	7.9	20	15	18
18	31	8.8	118	40	133	349	39	21	7.6	36	16	37
19	37	8.2	116	38	123	247	40	20	7.1	31	16	118
20	28	7.7	518	36	117	223	37	20	6.0	127	16	48
21	27	6.9	224	34	144	179	44	19	5.3	63	17	32
22	27	6.7	126	34	256	155	56	19	6.6	30	18	25
23	26	27	87	37	188	135	55	18	9.5	24	16	24
24	25	103	68	49	140	122	47	18	11	20	14	23
25	24	123	57	48	114	116	33	17	14	15	14	24
26	24	171	49	141	100	113	32	16	14	13	21	22
27	24	70	1600	416	91	106	33	16	14	15	19	21
28	24	40	1950	284	88	98	41	15	13	25	20	24
29	25	30	1010	247	---	139	51	15	12	31	16	29
30	25	23	409	243	---	128	48	14	11	85	20	27
31	24	---	254	142	---	110	---	16	---	55	20	---
TOTAL	828.3	820.8	8767.9	3713	3607	5094	1802	735	314.7	823	572	986
MEAN	26.7	27.4	283	120	129	164	60.1	23.7	10.5	26.5	18.5	32.9
MAX	90	171	1950	416	256	622	105	42	15	127	30	146
MIN	7.3	6.7	8.9	34	64	54	32	14	5.3	11	14	15
AC-FT	1640	1630	17390	7360	7150	10100	3570	1460	624	1630	1130	1960

CAL YR 1984 TOTAL 20151.2 MEAN 55.1 MAX 1950 MIN 6.2 AC-FT 39970
WTR YR 1985 TOTAL 28063.7 MEAN 76.9 MAX 1950 MIN 5.3 AC-FT 55660

09508300 WET BOTTOM CREEK NEAR CHILDS, AZ
(Hydrologic bench mark station)

LOCATION.--Lat 34°09'39", long 111°41'32", in sec.36, T.9 N., R.6 E. (unsurveyed), Gila County, Hydrologic Unit 15060203, in Tonto National Forest, on right bank 1.4 mi upstream from mouth and 13 mi south of Childs.

DRAINAGE AREA.--36.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1967 to current year.

REVISED RECORDS.--WRD Ariz. 1970: 1968(M).

GAGE.--Water-stage recorder. Elevation of gage is 2,320 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARGE.--18 years (water years 1968-85), 15.8 ft^3/s, 11,400 acre-ft/yr; median of yearly mean discharges, 10.6 ft^3/s, 7,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,830 ft^3/s Feb. 19, 1980, gage height, 16.0 ft, from high-water mark in gage well, from rating curve extended above 3,000 ft^3/s on basis of slope-area measurements at gage heights 9.77, 14.18, and 15.66 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 25	1230	296	5.91	Jan. 26	2015	239	5.74
Dec. 11	2100	357	6.08	July 18	1045	272	5.84
Dec. 13	0515	744	6.82	July 20	2100	135	5.35
Dec. 27	1730	*2,090	*8.50	July 30	0945	320	5.98
Jan. 8	1930	211	5.64	Sept. 11	1730	225	5.69

No flow June 10 to July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	.74	4.3	43	32	10	30	4.0	.21	.00	14	.21
2	2.1	.71	3.6	31	25	9.3	22	3.2	.21	.00	8.3	.21
3	2.3	.70	3.3	21	24	8.4	17	2.7	.18	.00	12	.16
4	13	.66	2.9	17	24	7.7	13	2.3	.19	.00	10	.13
5	10	.64	2.7	13	29	6.9	9.8	1.9	.21	.00	7.4	.14
6	7.2	.63	2.5	11	33	6.0	8.2	1.5	.17	.00	4.4	.15
7	4.8	.63	2.3	9.5	36	5.2	7.0	1.3	.12	.00	3.1	.18
8	3.6	.57	2.4	56	43	4.4	5.7	1.1	.04	.00	7.7	.17
9	2.9	.57	17	93	56	4.1	5.5	.93	.01	.00	3.6	.15
10	2.4	.57	16	51	71	3.8	6.2	.82	.00	.00	2.4	.17
11	2.0	.57	77	36	62	3.7	4.1	.75	.00	.00	1.7	38
12	2.1	.57	147	27	45	5.7	3.4	.70	.00	.00	1.2	26
13	1.8	.57	418	20	48	9.9	3.0	.66	.00	.00	.87	7.5
14	1.7	.57	154	16	46	7.8	2.7	.60	.00	.00	.69	3.9
15	1.5	.58	76	14	35	7.6	2.4	.56	.00	.00	.56	2.8
16	1.2	.59	46	12	28	23	2.0	.52	.00	7.8	.48	2.1
17	1.1	.60	35	10	22	38	1.8	.50	.00	1.5	.46	1.5
18	1.2	.63	29	9.0	18	24	1.6	.52	.00	76	.46	3.3
19	1.9	.63	25	8.1	15	19	1.5	.46	.00	17	.33	39
20	2.2	.62	48	7.3	13	16	1.5	.42	.00	37	.46	15
21	2.2	.61	57	6.4	26	13	1.7	.39	.00	37	.49	8.4
22	2.1	.63	33	5.6	38	11	5.1	.38	.00	12	.37	5.6
23	1.8	1.5	24	5.7	35	9.1	4.7	.35	.00	6.5	.28	3.8
24	1.5	1.0	18	7.2	27	8.0	3.5	.33	.00	3.9	.22	3.1
25	1.3	95	14	7.6	21	7.1	2.8	.28	.00	2.9	.21	2.5
26	1.2	49	11	53	17	5.9	2.5	.26	.00	2.1	.28	1.9
27	1.1	18	576	159	14	4.9	2.5	.23	.00	1.4	.26	1.5
28	.97	10	573	101	12	4.1	3.1	.22	.00	1.3	.30	1.5
29	.89	7.7	294	67	---	37	7.7	.20	.00	12	.22	1.3
30	.84	5.8	118	53	---	40	5.6	.24	.00	115	.19	1.1
31	.78	---	65	42	---	33	---	.29	---	38	.18	---
TOTAL	82.38	201.59	2895.0	1012.6	895	393.6	187.6	28.61	1.34	371.40	83.11	171.47
MEAN	2.66	6.72	93.4	32.7	32.0	12.7	6.25	.92	.04	12.0	2.68	5.72
MAX	13	95	576	159	71	40	30	4.0	.21	115	14	39
MIN	.78	.57	2.3	5.6	12	3.7	1.5	.20	.00	.00	.18	.13
AC-FT	163	400	5740	2010	1780	781	372	57	2.7	737	165	340

CAL YR 1984 TOTAL 4085.07 MEAN 11.2 MAX 576 MIN .00 AC-FT 8100
WTR YR 1985 TOTAL 6323.50 MEAN 17.3 MAX 576 MIN .00 AC-FT 12540

09508300 WET BOTTOM CREEK NEAR CHILDS, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1968 to current year.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 1984												
14...	1100	0.57	292	7.10	16.5	13.0	1.0	702	12.2	126	K1	61
FEB 1985												
21...	1345	17	76	7.40	13.5	11.0	18	695	9.6	96	K6	K16
MAY												
09...	1055	1.0	192	8.15	29.0	21.0	1.1	696	8.1	100	<1	63
AUG												
13...	1230	1.0	208	8.10	34.0	26.0	1.1	698	7.9	106	K49	280

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV 1984											
14...	110	0	30	8.7	21	0.9	1.0	--	--	214	6.0
FEB 1985											
21...	28	4	7.2	2.3	4.4	0.4	0.7	--	--	--	15
MAY											
09...	71	0	19	5.8	14	0.7	1.0	98	0	82	6.2
AUG											
13...	84	0	23	6.3	14	0.7	1.1	--	--	97	4.4

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)
NOV 1984											
14...	7.6	1.7	36	184	240	0.25	<0.10	0.01	0.2	0.03	<0.01
FEB 1985											
21...	2.4	0.4	17	76	67	0.1	<0.10	0.06	0.4	0.02	0.01
MAY											
09...	4.9	1.2	28	126	130	0.17	<0.10	0.02	<0.2	0.02	<0.01
AUG											
13...	5.1	1.1	33	143	150	0.19	<0.10	0.03	0.4	0.01	<0.01

DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV 1984											
14...	<0.01	--	--	--	--	--	--	--	--	--	--
FEB 1985											
21...	<0.01	--	3000	1	25	2	<1	<1	<3	4	220
MAY											
09...	<0.01	--	--	--	--	--	--	--	--	--	--
AUG											
13...	0.01	0.03	20	18	30	<0.5	<1	<1	<3	5	94

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09508300 WET BOTTOM CREEK NEAR CHILDS, AZ--Continued

WATER QUALITY DATA

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 1984											
14...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
21...	4	5	10	0.1	<10	3	<1	3	37	<6	8
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
AUG											
13...	<1	23	22	0.4	<10	<1	<1	<1	120	<6	31

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L) (80020)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
NOV 1984											
14...	--	--	--	--	--	--	--	--	57	2	0.0
FEB 1985											
21...	<1.3	1.3	1.0	1.5	0.9	1.4	0.08	0.12	43	4	0.19
MAY											
09...	--	--	--	--	--	--	--	--	33	3	0.01
AUG											
13...	--	--	--	--	--	--	--	--	44	3	0.01

< Actual value is known to be less than value shown.

09508500 VERDE RIVER BELOW TANGLE CREEK, ABOVE HORSESHOE DAM, AZ

LOCATION.--Lat 34°04'23", long 111°42'56", in sec.35, T.9 N., R.6 E. (unsurveyed), Yavapai County, Hydrologic Unit 15060203, in Tonto National Forest, on right bank 1.3 mi downstream from Tangle Creek and 9 mi upstream from Horseshoe Dam.

DRAINAGE AREA.--5,872 mi^2, includes 373 mi^2 in Aubrey Valley Playa, a closed basin.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1945 to current year.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,028.0 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. About 12,500 acres above station are irrigated by surface water and ground water. Low flow slightly regulated by powerplant 32 mi above station, using water from Fossil Creek. This station is above all major reservoirs on Verde River.

AVERAGE DISCHARGE.--40 years, 568 ft^3/s, 411,500 acre-ft/yr; median of yearly mean discharges, 420 ft^3/s, 304,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 94,800 ft^3/s Feb. 15, 1980, gage height, 21.41 ft; minimum discharge, 48 ft^3/s June 17, 1956, July 18, 19, 1958, caused by power regulation on Fossil Creek; minimum daily, 61 ft^3/s July 18, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1924, 100,000 ft^3/s Mar. 3, 1938, gage height, 19.0 ft, from floodmarks, based on comparison with peak discharge at other stations on Verde River.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	0430	*19,300	*13.95	Mar. 17	0815	6,220	9.94
Mar. 12	1145	10,700	11.84				

Minimum daily discharge, 113 ft^3/s July 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	251	247	274	2070	905	1370	1030	1030	161	123	362	342
2	240	261	269	1450	718	1930	1250	679	155	114	298	256
3	317	258	267	1070	641	1950	1140	494	154	113	284	262
4	366	257	269	838	622	1430	940	402	156	121	278	229
5	369	262	269	714	583	1030	846	317	161	123	246	217
6	323	272	265	625	541	833	746	278	166	125	223	188
7	279	276	265	565	507	769	644	251	162	119	210	177
8	257	272	271	713	492	758	577	253	156	124	209	170
9	242	272	292	1270	525	726	521	238	150	126	196	158
10	236	277	329	1020	584	728	468	222	141	131	193	164
11	233	283	371	858	712	4020	427	221	135	146	182	320
12	245	284	1250	661	738	8590	384	221	133	160	172	563
13	236	295	2300	582	1050	5510	339	207	133	160	164	288
14	243	282	2150	521	1430	3230	291	213	132	162	159	250
15	241	291	1290	478	1600	2580	269	216	130	162	151	214
16	245	291	886	452	1810	3380	258	211	127	236	148	199
17	264	296	718	433	1950	5180	244	198	124	171	148	188
18	272	296	650	418	2130	3970	240	198	125	542	150	218
19	276	293	734	409	2100	3050	234	213	125	295	144	413
20	266	296	1490	399	1820	3480	229	217	123	346	157	415
21	260	293	1690	395	1980	2670	234	211	124	414	162	378
22	259	286	1160	409	2610	2300	259	197	125	293	161	318
23	271	318	762	432	2700	1870	3230	192	122	231	153	291
24	270	340	607	463	2000	1570	2100	192	120	201	144	273
25	271	402	518	651	1390	1400	1040	171	128	179	139	250
26	273	481	467	831	1090	1390	732	165	130	168	145	242
27	283	365	1810	1400	1060	1370	554	159	138	155	150	232
28	269	314	16600	1610	1200	1190	508	154	135	164	157	237
29	270	294	12900	1480	---	1090	926	153	140	236	165	257
30	269	282	5910	1470	---	1050	1610	153	136	467	173	266
31	245	---	3090	1140	---	945	---	160	---	488	168	---
TOTAL	8341	8936	60123	25827	35488	71359	22270	8186	4147	6595	5791	7975
MEAN	269	298	1939	833	1267	2302	742	264	138	213	187	266
MAX	369	481	16600	2070	2700	8590	3230	1030	166	542	362	563
MIN	233	247	265	395	492	726	229	153	120	113	139	158
AC-FT	16540	17720	119300	51230	70390	141500	44170	16240	8230	13080	11490	15820

CAL YR 1984 TOTAL 155711 MEAN 425 MAX 16600 MIN 118 AC-FT 308900
WTR YR 1985 TOTAL 265038 MEAN 726 MAX 16600 MIN 113 AC-FT 525700

09508500 VERDE RIVER BELOW TANGLE CREEK ABOVE HORSESHOE DAM, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORDS.--October 1980 to current year.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT 1984 11...	1630	230	630	8.40	27.0	22.0	24	705	8.4	104	30	K38
NOV 14...	1300	276	665	7.60	19.0	14.0	16	710	9.8	102	--	<1
DEC 11...	1215	358	595	8.25	11.0	11.0	16	704	9.9	97	11	--
JAN 1985 15...	1400	458	530	8.50	19.0	9.0	6.6	706	11.0	--	14	K2
FEB 21...	1730	1800	255	8.10	10.5	12.0	32	703	10.1	102	12	K6
MAR 13...	1530	4870	156	8.30	23.0	11.0	85	705	10.1	99	20	K68
APR 11...	1415	438	460	8.60	30.0	21.0	3.6	708	8.2	99	20	K65
MAY 09...	1345	249	538	8.58	31.5	23.0	2.4	702	7.8	99	<10	K4
JUN 13...	1245	139	665	8.51	37.0	27.0	2.6	706	7.2	98	27	K2
JUL 11...	1300	151	703	8.50	37.0	28.0	2.1	705	7.4	--	17	K23
AUG 13...	1515	165	624	8.55	34.0	28.0	5.7	702	7.7	--	<10	K13
SEP 24...	1530	272	587	8.53	30.0	23.0	53	706	8.2	104	10	K28

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 1984 11...	80	250	27	45	34	39	1	2.7	--	--	225	72
NOV 14...	K7	260	20	45	36	40	1	2.5	--	--	241	67
DEC 11...	--	260	15	50	32	32	0.9	2.3	293	1.0	238	58
JAN 1985 15...	K4	240	16	51	27	30	0.9	2.3	--	--	223	42
FEB 21...	K24	120	3	27	12	9.5	0.4	1.3	--	--	--	16
MAR 13...	210	76	10	19	7.0	4.7	0.2	1.1	--	--	66	12
APR 11...	130	210	23	48	23	>5.0	--	2.0	--	--	192	32
MAY 09...	K10	240	26	50	28	>5.0	--	2.6	--	--	214	54
JUN 13...	K9	270	38	50	35	41	1	3.4	--	--	231	86
JUL 11...	K36	270	37	49	35	44	1	0.6	--	--	230	94
AUG 13...	K26	250	20	43	34	43	1	3.3	--	--	227	86
SEP 24...	K51	250	21	44	33	37	1	3.3	--	--	225	66

K Based on non-ideal colony count.
> Actual value is known to be greater than value shown.
< Actual value is known to be less than value shown.

09508500 VERDE RIVER BELOW TANGLE CREEK ABOVE HORSESHOE DAM, AZ--Continued

WATER QUALITY DATA

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT 1984												
11...	22	0.3	348	39	<0.10	0.03	0.27	0.3	--	--	0.07	17
NOV												
14...	22	0.3	359	19	<0.10	0.02	--	<0.2	--	--	<0.01	16
DEC												
11...	19	0.3	338	43	<0.10	<0.01	--	0.2	--	--	0.03	15
JAN 1985												
15...	14	0.3	307	8	0.20	0.02	0.28	0.3	0.5	2.2	0.05	17
FEB												
21...	5.7	0.1	167	54	<0.10	0.08	0.22	0.3	--	--	0.11	8
MAR												
13...	2.4	0.1	113	113	<0.10	0.07	0.83	0.9	--	--	0.46	9
APR												
11...	11	0.2	275	2	<0.10	0.03	0.77	0.8	--	--	0.02	14
MAY												
09...	15	0.4	324	6	<0.10	0.02	0.28	0.3	--	--	0.53	17
JUN												
13...	27	0.4	385	6	<0.10	0.04	0.26	0.3	--	--	0.02	18
JUL												
11...	29	0.4	406	4	<0.10	0.05	--	<0.2	--	--	0.02	21
AUG												
13...	25	0.4	385	19	<0.10	0.02	0.18	0.2	--	--	0.02	26
SEP												
24...	22	0.3	350	7	<0.10	0.04	0.16	0.2	--	--	0.04	21

DATE	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
OCT 1984												
11...	17	78	190	<1	<1	9	5	9	3	1200	4	6
NOV												
14...	16	64	200	<1	<1	7	<1	13	5	660	19	11
DEC												
11...	14	91	150	<1	1	6	<1	14	8	920	7	14
JAN 1985												
15...	16	71	120	<1	<1	7	2	4	5	430	<3	2
FEB												
21...	7	46	50	<1	<1	<1	*7	15	3	2700	35	11
MAR												
13...	4	29	20	1	<1	18	<1	41	5	*23000	28	8
APR												
11...	14	76	90	<1	<1	1	<1	5	3	210	6	6
MAY												
09...	15	83	150	1	<1	5	1	5	4	150	5	6
JUN												
13...	18	81	180	<1	<1	2	<1	9	5	140	3	9
JUL												
11...	22	75	210	<1	<1	5	<1	6	3	320	<3	<1
AUG												
13...	26	74	210	<1	1	2	<1	9	4	430	6	3
SEP												
24...	20	85	170	1	1	5	<1	5	6	430	<3	2

< Actual value is known to be less than value shown.
* Value verified.

09508500 VERDE RIVER BELOW TANGLE CREEK ABOVE HORSESHOE DAM, AZ--Continued

WATER QUALITY DATA

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1984 11...	1	40	10	<0.1	<1	<1	<1	40	11	49	30
NOV 14...	<1	30	<10	<0.1	<1	1	<1	30	6	14	10
DEC 11...	4	60	<10	0.1	1	1	1	30	9	34	33
JAN 1985 15...	4	20	--	0.3	<1	1	<1	40	15	8	9.9
FEB 21...	<1	50	4	<0.1	<1	<1	2	30	<3	67	344
MAR 13...	<1	*520	2	<0.1	<1	<1	<1	90	5	669	8800
APR 11...	6	10	5	0.1	<1	<1	1	<10	18	7	8.3
MAY 09...	<1	10	5	<0.1	<1	1	<1	10	4	14	9.4
JUN 13...	3	10	1	0.1	<1	1	<1	10	5	5	1.9
JUL 11...	<1	20	3	<0.1	<1	<1	<1	10	7	7	2.9
AUG 13...	1	30	9	<0.1	<1	<1	<1	60	37	14	6.2
SEP 24...	1	40	11	<1.0	<1	<1	<1	20	10	32	24

< Actual value is known to be less than value shown.
* Value verified.

09508500 RESERVOIR SYSTEM ON VERDE RIVER AT AND BELOW HORSESHOE DAM, AZ

LOCATION.--This system comprises two storage reservoirs created by Horseshoe and Bartlett Dams on Verde River, Hydrologic Unit 15060203. Gages on Horseshoe Reservoir, formed by Horseshoe Dam, lat 33°59'05", long 111°42'35", in sec.2, T.7 N., R.6 E. (unsurveyed); and Bartlett Reservoir, formed by Bartlett Dam, lat 33°49'05", long 111°37'52", in sec.34, T.6 N., R.7 E. (unsurveyed).

DRAINAGE AREA.--6,185 mi^2, at Bartlett Dam.

PERIOD OF RECORD.--July 1939 to current year. Prior to 1946 published as Bartlett Reservoir at Bartlett Dam.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorders on dam structures. Datum of gage on Horseshoe Reservoir is 1,900.00 ft and on Bartlett Reservoir 1,599.46 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 14, 1964, Bartlett Reservoir gage datum was 10.00 ft higher.

REMARKS.--Horseshoe Reservoir is formed by earthfill and rockfill dam; dam completed and storage began Nov. 15, 1945. Bartlett Reservoir is formed by concrete multiple-arch dam; dam completed May 1939 and storage began Feb. 5, 1939. Total capacity of the two reservoirs (capacity tables dated 1978, based on survey in 1977-78) is 309,600 acre-ft divided as follows: Horseshoe Reservoir, 131,400 acre-ft between elevations 1,915.0 ft - sill of outlet gage - and 2,026.0 ft - top of spillway gates; Bartlett Reservoir, 178,200 acre-ft between elevations 1,619.46 ft - 10 ft above sill of outlet gates - and 1,797.46 ft - top of spillway gates. No dead storage. There was no spillage over Bartlett Dam during 1985 water year. Records given herein represent usable contents. Water is used for irrigation of Salt River Valley and for municipal supply.

COOPERATION.--Capacity tables furnished by Salt River Valley Water Users' Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents of system, 318,000 acre-ft May 9, 1973; no storage at times when natural flow of river was passed through reservoir system.

EXTREMES FOR CURRENT YEAR.--Maximum contents of system, 309,000 acre-ft Mar. 31; minimum, 127,000 acre-ft Nov. 21-24.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154000	145000	129000	210000	250000	269000	308000	308000	279000	245000	221000	193000
2	154000	145000	129000	210000	252000	263000	306000	308000	279000	244000	220000	193000
3	154000	144000	129000	210000	253000	261000	306000	308000	279000	242000	220000	193000
4	156000	143000	129000	211000	254000	261000	306000	308000	279000	240000	220000	193000
5	156000	141000	129000	213000	254000	262000	307000	308000	279000	238000	219000	193000
6	157000	139000	129000	214000	255000	263000	307000	308000	278000	237000	218000	193000
7	157000	137000	129000	215000	255000	263000	307000	308000	278000	236000	217000	193000
8	157000	136000	130000	217000	255000	264000	307000	308000	277000	235000	215000	193000
9	157000	135000	130000	219000	256000	265000	307000	308000	276000	234000	214000	193000
10	157000	134000	129000	221000	257000	266000	307000	308000	274000	233000	213000	193000
11	157000	133000	129000	223000	257000	271000	307000	307000	273000	231000	212000	194000
12	156000	132000	132000	224000	257000	282000	306000	306000	271000	229000	211000	195000
13	156000	132000	138000	225000	257000	283000	306000	305000	270000	227000	209000	195000
14	155000	131000	142000	226000	258000	284000	306000	304000	268000	226000	208000	196000
15	154000	131000	144000	227000	260000	283000	305000	303000	266000	225000	206000	196000
16	154000	130000	146000	228000	263000	283000	306000	302000	265000	224000	205000	197000
17	153000	129000	148000	229000	266000	286000	306000	300000	263000	224000	204000	197000
18	152000	129000	150000	230000	270000	288000	306000	299000	262000	224000	203000	197000
19	152000	129000	151000	231000	273000	287000	306000	298000	260000	225000	202000	198000
20	151000	128000	155000	231000	276000	286000	306000	297000	259000	225000	201000	199000
21	150000	127000	158000	232000	278000	291000	306000	296000	257000	226000	200000	199000
22	150000	127000	161000	232000	281000	294000	305000	295000	255000	226000	200000	200000
23	149000	127000	162000	234000	283000	296000	306000	293000	254000	227000	200000	200000
24	149000	127000	163000	235000	282000	298000	305000	292000	253000	227000	200000	201000
25	149000	128000	165000	235000	280000	300000	306000	290000	252000	226000	199000	201000
26	148000	129000	165000	235000	277000	302000	307000	288000	251000	225000	198000	202000
27	148000	129000	169000	237000	275000	304000	307000	287000	250000	225000	197000	202000
28	147000	129000	187000	240000	272000	305000	307000	284000	248000	224000	197000	202000
29	147000	129000	204000	243000	---	307000	306000	282000	247000	223000	196000	203000
30	154000	129000	210000	246000	---	307000	308000	280000	246000	223000	195000	203000
31	146000	---	210000	248000	---	309000	---	279000	---	222000	194000	---
MAX	157000	145000	210000	248000	283000	309000	308000	308000	279000	245000	221000	203000
MIN	146000	127000	129000	210000	250000	261000	305000	279000	246000	222000	194000	193000
(**)	-8000	-17000	+81000	+38000	+24000	+37000	-1000	-29000	-33000	-24000	-28000	+9000

CAL YR 1984 MAX 239000 MIN 127000 ** -1000
WTR YR 1985 MAX 309000 MIN 127000 ** +49000

(**) Change in storage, in acre-feet.

09510000 VERDE RIVER BELOW BARTLETT DAM, AZ
(National stream-quality accounting network station)

LOCATION (revised).--Lat 33°48'30", long 111°39'46", in NW¼ sec.5, T.5 N., R.7 E. (unsurveyed), Maricopa County, Hydrologic Unit 15060203, in Tonto National Forest, on right bank 2.1 mi downstream from Bartlett Dam, 4.0 mi upstream from Camp Creek, and 16 mi east of town of Cave Creek.

DRAINAGE AREA.--6,188 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1888 to current year. (Monthly discharge only August 1888 to December 1903, and January 1910 to September 1913. For some periods prior to December 1903 gage heights, discharge measurements, and daily discharge hydrograph are published in reports of the Geological Survey.) Prior to October 1941, published under different names as follows: "near Fort McDowell," "at mouth," "above Salt River," "at McDowell," "at McDowell near Lehi," "near McDowell," and "above Camp Creek, near McDowell."

REVISED RECORDS.--WSP 1049: 1893, 1913-14, 1917-18, 1926-27, 1929. WSP 1213: 1915-16. WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,572.34 ft above National Geodetic Vertical Datum of 1929. Gage at present site and datum Jan. 1, 1942, to Sept. 30, 1961, Dec. 30, 1965, to Mar. 10, 1971, and Oct. 1, 1978, to the present; Mar. 2 to Sept. 30, 1978, used as supplementary gage, and Feb. 18, 1975, to Feb. 28, 1978, supplementary water-stage recorder at site 30 ft upstream at same datum. Oct. 1, 1961, to Dec. 29, 1965, and Mar. 11, 1971, to Sept. 30, 1973, water-stage recorder at site 1.9 mi upstream at datum 1,600 ft, from topographic map; at same site at datum 2.00 ft higher, Oct. 1, 1973, to Mar. 3, 1975, and 3.00 ft higher, Oct. 1, 1961, to Dec. 29, 1965, and Mar. 11, 1971, to Sept. 30, 1973. Feb. 17, 1925, to Dec. 31, 1941, water-stage recorder at two sites within 0.5 mi upstream from Camp Creek, at various datums. Prior to Feb. 17, 1925, nonrecording gages at several sites about 20 mi downstream from present location at various datums.

REMARKS.--Estimated daily discharges: Dec. 15-27, Jan. 5-24, and Jan. 28 to Feb. 4. Daily discharges for Feb. 5-14 were furnished by the Salt River Project. Records good except those for periods of estimated daily discharges, which are poor. About 12,500 acres above station are irrigated by surface water and ground water. Flow completely regulated by Bartlett Reservoir since Feb. 5, 1939, and Horseshoe Reservoir since Nov. 15, 1945 (see preceding page), except during periods of spill. Water diverted downstream for municipal supply of city of Phoenix, and for irrigation in Fort McDowell Indian Reservation. Remainder (except during infrequent periods of extreme flooding) is diverted at Granite Reef Dam on Salt River 27 mi downstream for irrigation in Salt River Valley, and for municipal use by the city of Phoenix.

AVERAGE DISCHARGE (adjusted for storage in Bartlett and Horseshoe Reservoirs).--97 years, 683 ft^3/s, 494,800 acre-ft/yr; median of yearly mean discharge, 550 ft^3/s, 398,000 acre-ft/ yr.

EXTREMES FOR PERIOD OF RECORD.--1888-1939: Maximum discharge not determined, probably over 150,000 ft^3/s Feb. 24, 1891; minimum daily, 29 ft^3/s July 11, 13, 1901. Floods of Nov. 27, 1905, and Mar. 4, 1938, reached maximum discharges of 96,000 ft^3/s and 95,000 ft^3/s, respectively.

1939-85: Maximum discharge, 101,000 ft^3/s Mar. 2, 1978; no flow at Bartlett Dam at times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,910 ft^3/s Dec. 28; minimum daily, 3.1 ft^3/s Dec. 17-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	483	280	1990	4.5	3240	1140	1250	334	463	712	413
2	116	594	315	1370	4.5	4970	2040	644	101	614	627	281
3	123	700	380	970	4.5	3090	1310	319	139	852	530	211
4	114	922	285	345	4.5	1420	776	356	169	888	477	182
5	79	994	217	10	286	861	744	283	197	867	515	251
6	90	1020	206	4.5	500	559	676	255	361	745	624	93
7	93	978	253	4.5	500	493	678	187	503	670	672	88
8	141	962	483	4.5	500	486	639	235	563	614	722	87
9	147	780	600	4.5	500	486	547	244	589	754	745	87
10	163	693	375	4.5	500	485	521	314	706	867	697	86
11	166	756	264	4.5	500	484	506	563	822	853	667	92
12	538	700	399	4.5	653	2130	505	627	832	876	716	88
13	588	606	390	4.5	800	4190	506	566	891	851	766	85
14	550	588	355	4.5	997	2910	477	648	952	699	747	83
15	494	588	111	4.5	193	2930	442	706	890	624	722	82
16	524	606	20	4.5	266	2930	149	849	749	629	737	69
17	618	544	3.1	4.5	265	2930	125	880	746	428	613	46
18	624	518	3.1	4.5	264	2940	210	690	745	253	520	63
19	594	512	3.1	4.5	352	2950	224	614	792	79	608	50
20	564	494	3.1	4.5	560	2350	209	673	922	75	617	45
21	570	494	3.1	4.5	571	1380	209	750	858	73	485	43
22	570	466	3.1	4.5	768	465	427	849	843	70	368	40
23	564	370	3.1	4.5	1540	455	1770	907	720	84	247	38
24	494	417	3.1	67	2740	446	2470	946	623	203	181	37
25	434	245	3.1	630	2630	387	758	925	630	424	318	36
26	483	225	3.1	801	2500	226	329	922	601	458	408	35
27	524	280	3410	333	2480	226	418	1040	575	396	472	35
28	518	285	9910	4.5	2470	227	665	1090	738	444	598	39
29	472	285	3490	4.5	---	368	1060	1110	782	457	608	38
30	412	321	3330	4.5	---	489	934	1140	666	603	607	35
31	444	---	2880	4.5	---	428	---	653	---	704	520	---
TOTAL	11927	17426	27984.0	6615.0	23354.0	47931	21464	21235	19039	16617	17848	2858
MEAN	385	581	903	213	834	1546	715	685	635	536	576	95.3
MAX	624	1020	9910	1990	2740	4970	2470	1250	952	888	766	413
MIN	79	225	3.1	4.5	4.5	226	125	187	101	70	181	35
AC-FT	23660	34560	55510	13120	46320	95070	42570	42120	37760	32960	35400	5670

CAL YR 1984 TOTAL 151236.0 MEAN 413 MAX 9910 MIN .00 AC-FT 300000
WTR YR 1985 TOTAL 234298.0 MEAN 642 MAX 9910 MIN 3.1 AC-FT 464700

09510000 VERDE RIVER BELOW BARTLETT DAM, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to December 1981, March 1982 to September 1982, April 1983 to current year.
WATER TEMPERATURES: December 1950 to December 1981, March 1982 to September 1982, April 1983 to current year.

REMARKS.--Unpublished daily specific conductance measurements for period December 1950 to September 1964 available from district office in Tucson, Ariz.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily observed, 958 microsiemens Nov. 10, 1956; minimum daily observed, 160 microsiemens Feb. 29, 1980.
WATER TEMPERATURES: Maximum daily observed, 32.0°C July 18, Aug. 14, 1951; minimum daily observed, 5.0°C Jan. 30, 1952.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily observed, 600 microsiemens Dec. 6, 13; minimum daily observed, 345 microsiemens May 2.
WATER TEMPERATURES: Maximum daily observed, 27.0°C Aug. 30, 31, Sept. 1-3; minimum daily observed, 10.0°C Feb. 4-22, Apr. 17.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
NOV 1984											
29...	1155	307	555	8.30	19.0	16.0	3.7	721	10.9	117	11
JAN 1985											
29...	1245	5.7	480	8.30	15.0	14.0	2.5	719	9.2	95	22
APR											
01...	1130	798	357	8.20	22.5	13.0	7.0	726	10.8	108	17
MAY											
28...	1045	1050	307	8.58	31.5	18.0	3.2	719	10.4	117	21
JUL											
23...	1135	73	343	8.30	38.5	24.0	1.5	715	9.9	126	21
SEP											
26...	1310	40	410	8.40	37.5	24.0	1.1	718	9.3	118	--

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)
NOV 1984											
29...	K1	27	230	0	44	29	34	1	3.3	--	--
JAN 1985											
29...	K1	44	210	31	45	24	25	0.8	2.4	--	--
APR											
01...	K2	K4	160	0	34	18	17	0.6	1.9	222	10
MAY											
28...	K1	K4	140	4	32	14	13	0.5	1.6	159	2.0
JUL											
23...	K5	K2	150	0	34	16	15	0.5	2.1	--	--
SEP											
26...	K7	K12	170	5	34	20	21	0.7	2.6	--	--

DATE	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
NOV 1984											
29...	266	66	18	0.4	--	337	--	--	10	<0.10	--
JAN 1985											
29...	181	46	15	0.3	19	279	290	0.38	1	0.10	0.13
APR											
01...	197	30	10	0.2	--	221	--	--	1	<0.10	--
MAY											
28...	131	22	7.1	0.2	16	168	190	0.23	286	<0.10	<0.10
JUL											
23...	211	22	8.1	0.2	16	190	240	0.26	<1	<0.10	0.16
SEP											
26...	163	30	11	0.3	17	239	230	0.33	1	<0.10	<0.10

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09510000 VERDE RIVER BELOW BARTLETT DAM, AZ--Continued

WATER QUALITY DATA

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
NOV 1984 29...	0.04	--	0.36	0.4	--	--	0.02	--	--	--	--
JAN 1985 29...	0.04	0.04	0.16	0.2	0.3	1.3	0.03	0.02	0.03	0.09	<10
APR 01...	0.08	--	0.32	0.4	--	--	0.04	--	--	--	--
MAY 28...	0.02	0.05	0.28	0.3	--	--	0.02	0.01	0.02	0.06	<10
JUL 23...	0.02	0.02	--	--	--	--	--	--	0.02	0.06	<10
SEP 26...	0.04	0.04	0.36	0.4	--	--	0.02	<0.01	0.01	0.03	20

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
NOV 1984 29...	14	13	59	--	160	<1	<1	22	5	--	6
JAN 1985 29...	12	12	40	<0.5	120	<1	<1	2	1	<3	4
APR 01...	10	9	46	--	80	<1	<1	7	<1	--	12
MAY 28...	7	7	45	<0.5	50	<1	<1	3	<1	<3	7
JUL 23...	10	9	43	<0.5	<10	<1	1	7	<1	<3	4
SEP 26...	12	12	49	<0.5	100	1	<1	5	<1	<3	4

DATE	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)
NOV 1984 29...	3	150	4	3	3	--	60	<10	0.1	--	--
JAN 1985 29...	2	--	14	3	<1	29	16	13	<0.1	<0.1	<10
APR 01...	15	340	17	3	3	--	40	15	0.3	--	--
MAY 28...	4	--	8	3	2	11	<10	2	<0.1	<0.1	<10
JUL 23...	7	--	4	<1	1	12	30	8	0.1	<0.1	<10
SEP 26...	5	--	<3	<1	1	33	30	11	<0.1	<0.1	<10

DATE	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
NOV 1984 29...	--	1	<1	1	--	--	20	13	67	5	4.1
JAN 1985 29...	<1	1	1	1	540	<6	20	25	64	20	0.31
APR 01...	--	<1	<1	<1	--	--	<10	10	70	11	24
MAY 28...	4	<1	<1	<1	300	<6	<10	<3	76	9	26
JUL 23...	<1	<1	<1	<1	350	<6	30	22	65	2	0.39
SEP 26...	<1	<1	<1	<1	430	<6	20	23	37	3	0.32

< Actual value is known to be less than value shown.

09510000 VERDE RIVER BELOW BARTLETT DAM, AZ--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG.C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	511	455	590	---	---	400	335	315	312	316	337	406
2	570	460	591	---	---	405	330	245	310	319	335	405
3	572	450	590	---	---	385	335	260	315	319	325	407
4	580	447	574	---	432	380	360	285	315	320	329	---
5	561	445	587	---	432	385	342	301	315	323	340	372
6	562	450	600	---	429	390	380	310	318	318	315	370
7	445	445	567	---	425	410	400	272	324	327	329	369
8	455	480	605	---	425	410	355	310	320	323	304	367
9	445	500	568	---	431	405	390	312	324	329	345	389
10	450	480	498	---	431	390	400	307	322	330	361	392
11	439	510	580	---	427	410	375	311	319	331	352	391
12	452	505	575	---	430	380	365	310	319	335	347	390
13	445	509	600	---	431	380	370	311	315	331	355	400
14	550	522	569	---	429	380	390	300	325	331	350	397
15	549	515	---	---	430	370	352	290	321	330	337	395
16	487	522	---	---	430	370	350	287	325	260	356	395
17	527	530	---	---	425	365	397	290	325	289	359	400
18	435	535	---	---	420	365	400	311	322	281	369	401
19	450	530	---	---	422	370	392	307	322	272	350	400
20	445	534	---	---	425	362	390	304	325	299	375	399
21	425	530	---	---	427	362	392	308	326	267	372	399
22	435	530	---	---	412	360	390	311	325	290	372	400
23	435	547	---	---	410	352	315	312	322	335	374	401
24	440	555	---	---	412	350	317	312	325	290	375	404
25	445	565	---	---	411	350	318	312	322	285	374	403
26	451	540	---	---	407	350	320	310	322	290	377	401
27	470	567	---	---	410	340	320	301	329	277	371	405
28	441	535	---	---	407	330	317	310	325	335	375	404
29	435	515	---	---	---	335	317	310	322	319	371	405
30	435	535	---	---	---	330	318	310	325	292	380	405
31	460	---	---	---	---	330	---	307	---	255	389	---
MEAN	477	508	---	---	---	371	358	301	321	307	355	---
MAX	580	567	---	---	---	410	400	315	329	335	389	---
MIN	425	445	---	---	---	330	315	245	310	255	304	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	15.0	15.0	---	---	---	13.0	15.0	17.0	20.0	22.0	27.0
2	25.0	15.0	15.0	---	---	11.0	12.0	14.0	17.0	20.0	22.0	27.0
3	24.0	14.0	15.0	---	---	11.0	12.0	14.0	---	---	22.0	27.0
4	24.0	14.0	15.0	---	10.0	11.0	14.0	14.0	---	20.0	22.0	---
5	24.0	14.0	15.0	---	10.0	11.0	14.0	14.0	---	20.0	22.0	26.0
6	23.0	14.0	14.0	---	10.0	11.0	13.0	14.0	17.0	20.0	22.0	26.0
7	14.0	14.0	14.0	---	10.0	11.0	13.0	14.0	17.0	20.0	22.0	26.0
8	15.0	15.0	14.0	---	10.0	11.0	13.0	14.0	17.0	20.0	23.0	26.0
9	14.0	14.0	14.0	---	10.0	11.0	13.0	14.0	17.0	20.0	23.0	26.0
10	14.0	15.0	14.0	---	10.0	11.0	13.0	14.0	17.0	20.0	25.0	26.0
11	14.0	15.0	14.0	---	10.0	11.0	13.0	14.0	17.0	20.0	25.0	26.0
12	14.0	15.0	14.0	---	10.0	11.0	13.0	14.0	17.0	20.0	25.0	26.0
13	14.0	14.0	13.0	---	10.0	11.0	13.0	14.0	17.0	20.0	25.0	26.0
14	14.0	15.0	13.0	---	10.0	11.0	13.0	14.0	17.0	20.0	25.0	25.0
15	14.0	15.0	---	---	10.0	11.0	13.0	14.0	18.0	21.0	25.0	25.0
16	15.0	15.0	---	---	10.0	11.0	13.0	14.0	18.0	21.0	25.0	25.0
17	14.0	16.0	---	---	10.0	11.0	10.0	14.0	18.0	21.0	25.0	24.0
18	13.0	15.0	---	---	10.0	12.0	12.0	14.0	18.0	21.0	25.0	24.0
19	13.0	15.0	---	---	10.0	12.0	12.0	15.0	18.0	21.0	25.0	24.0
20	13.0	15.0	---	---	10.0	11.0	12.0	15.0	19.0	21.0	25.0	24.0
21	14.0	15.0	---	---	10.0	12.0	12.0	16.0	19.0	21.0	25.0	24.0
22	14.0	15.0	---	---	10.0	12.0	13.0	15.0	19.0	21.0	25.0	24.0
23	13.0	16.0	---	---	11.0	13.0	13.0	15.0	19.0	21.0	25.0	24.0
24	13.0	16.0	---	---	11.0	13.0	13.0	15.0	19.0	21.0	25.0	24.0
25	13.0	15.0	---	---	11.0	13.0	13.0	16.0	19.0	21.0	26.0	24.0
26	13.0	15.0	---	---	11.0	13.0	13.0	16.0	19.0	21.0	26.0	24.0
27	13.0	15.0	---	---	11.0	13.0	12.0	16.0	19.0	21.0	26.0	24.0
28	13.0	15.0	---	---	11.0	13.0	13.0	16.0	19.0	21.0	26.0	24.0
29	13.0	14.0	---	---	---	12.0	13.0	17.0	20.0	21.0	26.0	24.0
30	13.0	14.0	---	---	---	13.0	13.0	17.0	20.0	22.0	27.0	24.0
31	13.0	---	---	---	---	13.0	---	17.0	---	22.0	27.0	---
MEAN	15.6	14.8	---	---	---	---	12.7	14.8	---	---	24.5	---
MAX	25.0	16.0	---	---	---	---	14.0	17.0	---	---	27.0	---
MIN	13.0	14.0	---	---	---	---	10.0	14.0	---	---	22.0	---

09510070 WEST FORK SYCAMORE CREEK ABOVE MCFARLAND CANYON, NEAR SUNFLOWER, AZ

LOCATION.--Lat 33°57'38", long 111°29'12", in SE¼SW¼ sec.12, T.7 N., R.8 E. (unsurveyed), Maricopa County, Hydrologic Unit 15060203, in Tonto National Forest, on left bank 0.2 mi upstream from McFarland Canyon and 6.8 mi north of Sunflower.

DRAINAGE AREA.--4.58 mi^2.

PERIOD OF RECORD.--October 1965 to September 1974, October 1982 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,380 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARE.--12 years (water years 1966-74, 1983-85) 1.18 ft^3/s, 855 acre-ft/yr; median of yearly mean discharges, 0.54 ft^3/s, 390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,700 ft^3/s Sept. 5, 1970, gage height, 5.50 ft, from rating curve extended above 68 ft^3/s on basis of slope-area measurement of peak flow; no flow for several days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1915	10	2.41	Dec. 27	1630	*97	*3.27
Dec. 11	1830	18	2.58	Jan. 27	2045	12	2.45

No flow for 19 days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.19	.64	4.4	5.8	2.3	2.1	.75	.10	.01	.02	.00
2	.07	.18	.56	3.3	4.9	2.1	2.3	.70	.10	.01	.02	.00
3	2.9	.18	.50	2.7	4.5	2.0	2.3	.65	.09	.01	.02	.00
4	3.2	.17	.60	2.4	4.0	1.8	2.1	.58	.09	.01	.01	.00
5	2.7	.16	.42	2.1	3.7	1.6	1.9	.52	.08	.01	.01	.00
6	2.0	.14	.35	1.9	3.9	1.5	1.7	.48	.08	.01	.01	.01
7	1.3	.14	.34	1.8	4.6	1.4	1.7	.45	.07	.02	.01	.02
8	.96	.14	.68	3.1	6.0	1.3	1.5	.40	.07	.01	.01	.01
9	.66	.14	.62	3.7	7.5	1.2	1.5	.37	.06	.01	.01	.00
10	.43	.14	1.2	3.3	7.9	1.2	1.4	.34	.06	.01	.01	.01
11	.31	.14	6.5	3.0	7.4	1.3	1.3	.32	.05	.01	.01	.03
12	1.2	.14	8.7	2.6	6.4	1.5	1.3	.31	.04	.00	.01	.01
13	.72	.14	11	2.5	6.3	1.3	1.2	.29	.04	.01	.00	.01
14	.97	.14	6.8	2.3	5.9	1.3	1.2	.27	.03	.02	.00	.01
15	1.9	.14	4.6	2.2	5.0	1.5	1.2	.24	.03	.01	.00	.01
16	2.3	.13	3.6	1.9	4.2	1.7	1.1	.22	.03	.02	.00	.01
17	2.3	.13	3.3	1.8	3.5	1.8	1.1	.21	.03	.01	.00	.01
18	1.9	.13	3.3	1.6	3.0	2.0	1.1	.19	.03	.03	.00	.04
19	1.5	.14	3.3	1.5	2.6	2.1	1.0	.18	.03	.02	.00	.03
20	1.2	.14	3.4	1.4	2.4	2.0	.98	.17	.03	.02	.02	.02
21	1.0	.13	3.3	1.3	3.4	1.8	1.2	.16	.03	.02	.01	.02
22	.82	.12	3.0	1.2	3.2	1.7	1.1	.15	.03	.02	.00	.02
23	.62	.21	2.7	1.4	3.3	1.6	.98	.14	.03	.01	.00	.02
24	.49	.18	2.4	1.1	3.3	1.6	.91	.13	.03	.01	.00	.02
25	.37	2.8	2.1	1.0	3.2	1.5	.86	.14	.02	.01	.00	.01
26	.30	2.0	1.9	3.1	3.0	1.4	.87	.14	.02	.01	.01	.01
27	.28	1.5	36	9.2	2.7	1.3	.90	.13	.02	.01	.00	.01
28	.24	1.1	33	11	2.5	1.4	1.1	.12	.02	.01	.01	.03
29	.22	.91	20	10	---	2.3	.92	.12	.02	.01	.01	.03
30	.20	.77	9.7	9.0	---	1.9	.83	.12	.01	.03	.01	.02
31	.19	---	6.3	7.3	---	2.0	---	.11	---	.02	.01	---
TOTAL	33.31	12.67	180.81	105.1	124.1	51.4	39.65	9.10	1.37	.42	.23	.42
MEAN	1.07	.42	5.83	3.39	4.43	1.66	1.32	.29	.05	.01	.01	.01
MAX	3.2	2.8	36	11	7.9	2.3	2.3	.75	.10	.03	.02	.04
MIN	.06	.12	.34	1.0	2.4	1.2	.83	.11	.01	.00	.00	.00
AC-FT	66	25	359	208	246	102	79	18	2.7	.8	.45	.8

CAL YR 1984 TOTAL 278.83 MEAN .762 MAX 36 MIN .00 AC-FT 553
WTR YR 1985 TOTAL 558.58 MEAN 1.53 MAX 36 MIN .00 AC-FT 1110

09510100 EAST FORK SYCAMORE CREEK NEAR SUNFLOWER, AZ

LOCATION.--Lat 33°56'58", long 111°27'39", in NE¼SE¼ sec. 18, T.7 N., R.9 E., Maricopa County, Hydrologic Unit 15060203, in Tonto National Forest, on left bank 1.7 mi upstream from confluence with West Fork and 6.0 mi north of Sunflower.

DRAINAGE AREA.--4.49 mi^2.

PERIOD OF RECORD.--July 1961 to current year. Low-flow records not equivalent prior to Nov. 10, 1964, owing to undetermined amount of underflow between sites.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,140 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 10, 1964, at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Feb. 20 to Mar. 20, and May 17 to June 12. Records good except those for periods of estimated daily discharges, which are fair. No storage or diversion above station.

AVERAGE DISCHARGE.--24 years, 0.962 ft^3/s, 697 acre-ft/yr; median of yearly mean discharges, 0.44 ft^3/s, 320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft^3/s Sept. 5, 1970, gage height, 9.50 ft, from profile past gage, from rating curve extended above 130 ft^3/s on basis of slope-area measurements at gage heights 5.07 and 9.50 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1730	42	2.52
Dec. 27	1615	*78	*2.95

Minimum daily, 0.01 ft^3/s for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.04	.12	2.0	2.8	1.6	.84	.42	.05	.01	.02	.02
2	.01	.04	.12	1.5	2.3	1.4	.78	.40	.04	.01	.02	.02
3	4.1	.03	.11	1.2	2.4	1.3	.76	.39	.04	.01	.02	.02
4	.49	.03	.19	1.0	2.4	1.2	.73	.36	.04	.01	.02	.02
5	.05	.03	.13	.91	2.2	1.1	.69	.35	.03	.01	.02	.02
6	.04	.04	.11	.82	2.8	1.0	.68	.32	.03	.01	.01	.29
7	.03	.04	.10	.78	3.4	.90	.66	.31	.03	.01	.01	.03
8	.03	.04	.27	3.6	4.3	.80	.64	.29	.03	.01	.01	.02
9	.03	.04	.28	3.3	4.9	.70	.62	.28	.02	.01	.01	.02
10	.03	.04	.36	2.2	5.2	.70	.60	.26	.02	.01	.01	.02
11	.03	.04	3.9	1.8	4.4	.80	.57	.27	.02	.01	.01	.08
12	.19	.04	3.3	1.5	3.7	.90	.55	.26	.02	.01	.01	.02
13	.05	.04	9.5	1.2	3.6	.80	.53	.25	.02	.01	.01	.02
14	.04	.04	3.4	1.1	3.1	.70	.50	.23	.02	.76	.01	.02
15	.15	.04	2.0	.97	2.6	.70	.49	.21	.02	.21	.01	.02
16	.10	.04	1.5	.88	2.2	.80	.49	.18	.02	.17	.01	.02
17	.10	.04	1.3	.80	1.9	.90	.49	.18	.02	.02	.02	.02
18	.09	.05	1.1	.75	1.7	1.0	.55	.16	.02	.53	.02	.25
19	.07	.04	.91	.70	1.5	1.1	.53	.15	.02	.03	.02	.03
20	.06	.04	1.2	.65	1.4	.90	.49	.13	.02	.02	.03	.02
21	.06	.04	1.0	.63	2.7	.90	.66	.12	.01	.02	.02	.02
22	.06	.04	.86	.62	2.6	.85	.55	.11	.02	.02	.02	.02
23	.05	.24	.75	.80	2.7	.80	.49	.10	.01	.02	.02	.02
24	.05	.10	.63	.65	2.7	.78	.46	.09	.01	.02	.02	.02
25	.05	4.5	.55	.60	2.6	.74	.44	.09	.01	.02	.02	.02
26	.05	.78	.50	3.4	2.4	.71	.48	.08	.01	.02	.02	.01
27	.05	.34	28	8.6	2.0	.69	.53	.07	.01	.02	.02	.01
28	.05	.23	21	7.2	1.8	.74	.73	.07	.01	.03	.02	.01
29	.05	.17	10	5.9	---	1.4	.52	.06	.01	.02	.02	.01
30	.05	.14	4.7	4.8	---	.97	.47	.06	.01	.03	.02	.01
31	.05	---	2.8	3.7	---	.90	---	.05	---	.02	.02	---
TOTAL	6.27	7.36	100.69	64.56	78.3	28.78	17.52	6.30	.64	2.11	.52	1.13
MEAN	.20	.25	3.25	2.08	2.80	.93	.58	.20	.02	.07	.02	.04
MAX	4.1	4.5	28	8.6	5.2	1.6	.84	.42	.05	.76	.03	.29
MIN	.01	.03	.10	.60	1.4	.69	.44	.05	.01	.01	.01	.01
AC-FT	12	15	200	128	155	57	35	12	1.3	4.2	1.0	2.2

CAL YR 1984 TOTAL 152.22 MEAN .416 MAX 28 MIN .01 AC-FT 302
WTR YR 1985 TOTAL 314.18 MEAN .861 MAX 28 MIN .01 AC-FT 623

09510200 SYCAMORE CREEK NEAR FORT MCDOWELL, AZ

LOCATION.--Lat 33°41'39", long 111°32'28", in sec.16, T.4 N., R.8 E. (unsurveyed), Maricopa County, Hydrologic Unit 15060203, in Tonto National Forest, on right bank 0.7 mi southwest of Sugarloaf Mountain, 9 mi northeast of Fort McDowell, 10 mi upstream from mouth, and 25 mi northeast of Scottsdale.

DRAINAGE AREA.--164 mi^2.

PERIOD OF RECORD.--December 1960 to current year. Prior to Oct. 1, 1963, published as "near McDowell."

REVISED RECORDS.--WRD Ariz. 1970: Drainage area.

GAGE.--Water-stage recorder, a crest-stage gage, and a concrete control. Datum of gage is 1,759.33 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1970, at datum 0.16 ft lower.

REMARKS.--Estimated daily discharges: Nov. 9-12, Nov. 25 to Dec. 5, Mar. 13-21, June 11 to July 8, and Sept. 7-12. Records fair except for periods of estimated daily discharges, June 11 to July 8 and Sept. 7-12, which are poor.

AVERAGE DISCHARGE.--24 years (water years 1962-85), 31.4 ft^3/s, 22,750 acre-ft/yr; median of yearly mean discharges, 14 ft^3/s, 10,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,200 ft^3/s Sept. 5, 1970, gage height, 19.7 ft, from profile past gage, from rating curve extended above 3,600 ft^3/s on basis of slope-area measurements at gage heights 15.0, 16.0, and 19.7 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	a0600	860	3.10	Dec. 27	1845	*2,960	*5.60
Nov. 25	a1500	748	b2.92	Jan. 27	1100	689	2.82
Dec. 13	0745	1,370	3.82				

Minimum daily, 0.04 ft^3/s July 3-9, 11.

a Estimated.
b From floodmarks.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	2.2	9.0	122	109	43	48	6.8	.34	.05	.34	1.9
2	.86	2.1	7.0	90	86	40	43	5.5	.36	.05	3.4	.64
3	88	2.1	6.0	70	90	38	41	4.9	.35	.04	.51	.38
4	65	2.3	5.0	57	96	35	39	5.1	.35	.04	.62	.25
5	12	2.7	4.4	47	112	33	35	5.6	.38	.04	.38	.23
6	4.7	2.8	3.2	43	110	31	33	5.1	.34	.04	.35	.24
7	3.1	2.8	2.5	38	110	29	30	4.9	.32	.04	.34	.20
8	2.3	2.8	2.7	110	115	27	26	4.9	.31	.04	.32	.20
9	2.2	2.6	4.2	162	131	27	25	4.6	.28	.04	.34	.20
10	2.0	2.4	6.3	109	136	90	23	4.1	.26	.05	.18	.20
11	2.0	2.2	42	85	120	157	20	3.9	.20	.04	.19	8.5
12	2.0	2.0	163	71	101	200	18	3.6	.20	.06	.51	3.7
13	2.0	1.9	572	63	90	110	16	3.6	.20	.06	.55	1.3
14	2.0	2.2	198	54	81	90	15	3.3	.20	.07	.58	.98
15	1.9	2.2	108	49	73	70	14	2.9	.20	.07	.62	.89
16	1.9	2.2	71	44	66	60	14	2.6	.10	.11	.73	.87
17	2.3	2.2	53	40	59	52	14	2.4	.10	.10	.71	.87
18	2.3	2.2	44	38	54	47	12	2.5	.10	.13	.64	52
19	2.4	2.2	41	35	49	41	12	2.6	.10	.13	.59	5.5
20	2.4	2.2	43	33	44	37	12	2.8	.10	.13	.61	.96
21	2.4	2.2	42	30	85	34	12	2.7	.09	.29	.55	.81
22	2.4	2.2	35	29	86	31	14	2.5	.09	.26	.54	.78
23	2.3	3.4	36	32	74	29	12	2.5	.08	.18	.52	.78
24	2.4	2.3	33	32	63	27	9.5	2.1	.08	.16	.52	.78
25	2.2	120	30	27	58	30	8.5	1.5	.07	.19	.55	.78
26	2.2	35	27	95	53	28	7.6	.93	.07	.21	.55	.87
27	2.3	23	857	261	50	26	8.4	.67	.06	.25	.58	.92
28	2.2	17	868	219	48	25	12	.57	.06	.28	.55	1.1
29	2.2	14	647	169	---	56	11	.53	.06	.31	.60	1.2
30	2.2	10	264	146	---	60	8.3	.54	.05	.31	.62	1.2
31	2.3	---	167	128	---	52	---	.51	---	.33	5.4	---
TOTAL	227.34	275.4	4391.3	2528	2349	1655	593.3	96.75	5.50	4.10	23.49	89.23
MEAN	7.33	9.18	142	81.5	83.9	53.4	19.8	3.12	.18	.13	.76	2.97
MAX	88	120	868	261	136	200	48	6.8	.38	.33	5.4	52
MIN	.86	1.9	2.5	27	44	25	7.6	.51	.05	.04	.18	.20
AC-FT	451	546	8710	5021	4660	3280	1180	192	11	8.1	47	177

CAL YR 1984 TOTAL 6547.76 MEAN 17.9 MAX 868 MIN .01 AC-FT 12990
WTR YR 1985 TOTAL 12238.41 MEAN 33.5 MAX 868 MIN .04 AC-FT 24270

09511000 DIVERSIONS FOR CITY OF PHOENIX FROM SALT AND VERDE RIVERS, NEAR FORT MCDOWELL, AZ

LOCATION.--Lat 33°32'55", long 111°40'05", in NE¼ sec.6, T.2 N., R.7 E., Maricopa County, in filtration plant 0.5 mi west of confluence of Salt and Verde Rivers, and 6 mi south of Fort McDowell.

PERIOD OF RECORD.--February 1922 to current year (monthly diversions only). Prior to October 1950, published as Diversion for city of Phoenix from Verde River, at McDowell, and October 1950 to September 1960, as Diversion for city of Phoenix from Salt and Verde Rivers, near McDowell.

GAGE.--Sparling meter. Prior to January 1929 computed on basis of records of water consumption and pumpage. January 1929 to April 1950, water-stage recorder and weir on aqueduct 2 mi upstream.

REMARKS.--Water is diverted from infiltration galleries and shallow wells along the right bank of Verde River, in SE¼ sec.6, T.3 N., R.7 E., 0.8 mi south of Fort McDowell. Since May 1950 a supplemental diversion is made by pumping from Verde River in SE¼ sec.31, T.3 N., R.7 E. Since May 6, 1954, a supplemental diversion by four pumps is made from Salt River in SE¼ sec.6, T.2 N., R.7 E., just downstream from Verde River. Water from all three sources passes through the filtration plant where total diversions, as published herein, are measured. Water is used for municipal supply of city of Phoenix, and is carried about 25 mi by pipeline from the filtration plant. Negligible amount of transmission loss occurs.

COOPERATION.--Records collected by city of Phoenix and furnished by Salt River Valley Water Users' Association.

REVISIONS.--WSP 1926: 1956-60.

MONTHLY DIVERSIONS, IN ACRE-FEET, OCTOBER 1980 TO SEPTEMBER 1985

Month	1980-81	1981-82	1982-83	1983-84	1984-85
October	1,800	2,030	2,220	1,740	1,760
November	1,720	1,740	1,850	1,530	1,550
December	1,540	1,560	1,070	1,500	1,020
CAL YR	28,960	23,380	21,740	21,120	19,330
January	1,500	1,230	984	1,510	1,150
February	1,910	1,110	1,290	1,660	1,080
March	2,240	1,210	1,750	1,770	704
April	2,200	2,100	1,720	1,640	1,690
May	1,810	2,180	1,910	1,690	1,720
June	2,160	2,190	2,190	1,680	1,620
July	2,170	2,240	2,240	1,740	1,690
August	2,070	2,200	2,210	1,740	1,750
September	1,990	2,140	2,060	1,570	1,540
WTR YR	23,110	21,930	21,490	19,770	17,270

09511300 VERDE RIVER NEAR SCOTTSDALE, AZ

LOCATION.--Lat 33°33'34", long 111°40'09", in NW¼NE¼SE¼ sec.31, T.3 N., R.7 E., Maricopa County, Hydrologic Unit 15060203, in Salt River Indian Reservation, on right bank, at downstream side of Verde Plant intake structure, 1.5 mi downstream from State Highway 87 (Beeline highway) 0.75 mi north of city of Phoenix water treatment plant, 1.1 mi upstream from mouth and 16 mi northeast of the city of Scottsdale.

DRAINAGE AREA.--6,600 mi^2, approximately.

PERIOD OF RECORD.--February 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,320.31 ft above National Geodetic Vertical Datum of 1929. Prior to October 1, 1980 at site 1.6 mi upstream on State Highway 87 bridge at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Bartlett and Horseshoe Reservoirs (see sta 09509500) except during periods of spill or floodflow below Bartlett Dam. About 12,500 acres above reservoirs are irrigated by surface water and ground water. Below reservoirs water is diverted for municipal supply of city of Phoenix, and for irrigation of an undetermined acreage in Fort McDowell Indian Reservation. Remainder (except during infrequent period of extreme flooding) is diverted at Granite Reef Dam on Salt River, 6 mi downstream, for irrigation in Salt River Valley and for municipal use by the city of Phoenix.

AVERAGE DISCHARGE.--24 years, 681 ft^3/s, 493,400 acre-ft/yr; median of yearly mean discharges, 490 ft^3/s, 355,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 98,000 ft^3/s Feb. 16, 1980, on basis of flood routing, gage height, not determined; no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,710 ft^3/s Dec. 28; minimum daily, 9.0 ft^3/s Jan. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	419	282	1890	85	2740	564	815	477	524	654	419
2	96	485	279	1600	64	4890	1850	950	209	428	617	322
3	269	517	322	976	63	3770	1680	454	117	708	537	238
4	160	765	329	876	64	1840	849	374	155	777	469	199
5	122	914	241	214	310	1180	840	330	170	791	446	199
6	77	924	191	100	453	792	763	304	234	694	550	188
7	71	909	205	69	488	647	744	234	388	641	596	112
8	89	865	256	58	488	596	730	223	492	560	626	100
9	117	746	583	124	517	536	606	255	500	598	661	94
10	126	621	357	92	532	503	569	240	573	763	630	89
11	142	643	298	66	551	488	536	396	726	735	604	100
12	232	643	634	54	741	862	528	585	758	777	613	100
13	477	566	489	42	788	4060	516	536	811	782	670	87
14	477	521	368	35	1270	2880	496	556	899	694	674	83
15	438	513	253	27	1100	2940	439	658	904	573	639	79
16	423	546	94	24	400	2980	378	749	740	645	674	77
17	477	509	56	20	346	2960	144	869	726	465	617	67
18	537	469	39	18	334	2990	160	712	708	360	481	98
19	529	469	33	17	325	3010	223	598	694	193	521	87
20	497	446	29	15	521	2740	223	628	849	117	600	62
21	497	450	23	14	608	1920	196	676	791	113	473	54
22	497	419	20	12	671	698	232	763	801	105	378	46
23	497	423	17	11	1040	594	874	825	726	90	309	42
24	469	357	15	9.0	2640	548	2670	889	632	103	205	41
25	400	375	14	83	2660	508	1190	899	598	232	220	39
26	400	256	13	720	2540	360	439	859	598	417	305	36
27	457	266	516	792	2540	304	477	960	508	357	368	33
28	477	276	9710	384	2540	288	528	1010	628	388	469	38
29	438	276	4070	206	---	298	909	1030	721	392	509	36
30	400	285	3110	142	---	473	1250	1080	636	488	537	33
31	364	---	2950	110	---	450	---	815	---	598	469	---
TOTAL	10348	15873	25796	8800.0	24679	49845	21603	20272	17769	15108	16121	3198
MEAN	334	529	832	284	881	1608	720	654	592	487	520	107
MAX	537	924	9710	1890	2660	4890	2670	1080	904	791	674	419
MIN	71	256	13	9.0	63	288	144	223	117	90	205	33
AC-FT	20530	31480	51170	17450	48950	98870	42850	40210	35240	29970	31980	6340

CAL YR 1984 TOTAL 141821.0 MEAN 387 MAX 9710 MIN 6.0 AC-FT 281300
WTR YR 1985 TOTAL 229412.0 MEAN 629 MAX 9710 MIN 9.0 AC-FT 455000

09512000 DIVERSIONS FROM SALT RIVER AT GRANITE REEF DAM, AZ

LOCATION.--Lat 33°30'57", long 111°41'27", in NW¼SE¼ sec.13, T.2 N., R.6 E., Maricopa County, at Granite Reef Dam, on Salt River, 3.4 mi downstream from Verde River, and 8 mi south of Fort McDowell.

PERIOD OF RECORD.--January 1913 to current year (monthly discharge only).

GAGE.--Water-stage recorders on Arizona and South Canals, 2,000 ft and 1,800 ft, respectively, downstream from head-gates at Granite Reef Dam. In early years staff gages at about the same sites. During period 1930-36 discharge computed using Clausen-Pierce hydraulic weir rule at submerged weirs.

REMARKS.--Arizona Canal diverts at the right end, and South Canal at the left end, of Granite Reef Dam. Records given herein are those of discharge at the two gaging stations less return flow to Salt River by wasteways between stations and irrigated lands. Return flow computed from records of rated gates or weirs in the waste ways. City of Phoenix diverts water for municipal use from Arizona Canal (see sta 09512050), which is included in records published herein. Remainder of water is used for irrigation in Salt River Valley. Flow at Granite Reef Dam is regulated by four dams on Salt River and two on Verde River (see sta 09501000 and 09509500); combined capacity of six reservoirs, 2,073,000 acre-ft.

COOPERATION.--Records furnished by Salt River Valley Water Users' Association.

MONTHLY DIVERSIONS, IN ACRE-FEET, OCTOBER 1980 TO SEPTEMBER 1985

Month	1980-81	1981-82	1982-83	1983-84	1984-85
October	58,870	25,320	41,010	40,510	34,220
November	37,640	15,150	20,460	41,680	33,690
December	48,130	11,970	24,460	42,570	23,180
CAL YR	1,327,000	822,200	890,400	1,075,000	724,900
January	36,800	12,540	54,490	49,270	31,950
February	38,940	14,490	38,830	50,310	48,620
March	75,400	80,110	57,620	63,850	101,400
April	84,360	95,230	124,500	59,400	124,300
May	76,820	92,850	153,200	69,910	148,900
June	124,200	138,600	146,000	98,020	137,700
July	146,200	151,400	144,300	76,650	131,300
August	115,100	127,400	120,600	86,670	137,500
September	71,930	91,900	110,700	79,740	79,660
WTR YR	914,400	857,000	1,036,000	758,600	1,032,000

09512050 DIVERSIONS FOR CITY OF PHOENIX FROM ARIZONA CANAL, AT PHOENIX, AZ

LOCATION.--Squaw Peak filtration plant: lat 33°31'52", long 112°01'54", in SE¼ sec.10, T.2 N., R.3 E., Maricopa County, 6 mi north of Phoenix city hall, and 24 mi downstream from Granite Reef Dam. Deer Valley filtration plant: lat 33°34'10", long 112°07'26", in SE¼ sec.26, T.3 N., R.2 E., Maricopa County, 9 mi north of Phoenix city hall, and 31 mi downstream from Granite Reef Dam.

PERIOD OF RECORD (monthly diversions only).--Squaw Peak filtration plant: June 1954 to current year. Deer Valley filtration plant: October 1964 to current year.

GAGE.--Sparling meters.

REMARKS.--Records published herein are combined diversions at Squaw Peak filtration plant and at Deer Valley filtration plant. Diversions from Arizona Canal at Squaw Peak filtration plant began June 3, 1954; water is used for municipal supply of city of Phoenix. Diversions from Arizona Canal at Deer Valley filtration plant began Oct. 21, 1964; water is used for municipal supply in Deer Valley. Arizona Canal diverts at right end of Granite Reef Dam on Salt River. See sta 09512000 for diversions at Granite Reef Dam.

COOPERATION.--Records collected by city of Phoenix and furnished by Salt River Valley Water Users' Association.

REVISIONS.--WSP 1926: 1954-60.

MONTHLY DIVERSIONS, IN ACRE-FEET, OCTOBER 1980 TO SEPTEMBER 1985

Month	1980-81	1981-82	1982-83	1983-84	1984-85
October	6,680	5,130	5,820	5,580	5,360
November	1,840	1,700	1,270	1,460	979
December	930	647	1,820	1,050	1,570
CAL YR	100,400	54,440	56,980	54,120	57,410
January	1,530	1,830	3,130	3,310	3,270
February	1,090	2,100	1,750	3,550	3,500
March	1,810	2,880	2,470	4,800	4,340
April	3,700	3,790	3,340	3,750	5,320
May	6,540	7,470	6,120	6,510	7,990
June	8,390	8,570	8,080	8,550	8,380
July	8,420	8,150	8,620	7,360	8,790
August	7,950	6,900	6,230	6,160	8,360
September	7,530	6,380	6,290	5,510	5,790
WTR YR	56,410	55,550	54,940	57,590	63,650

09512200 SALT RIVER TRIBUTARY IN SOUTH MOUNTAIN PARK, AT PHOENIX, AZ

LOCATION.--Lat 33°20'49", long 112°05'03", in NE¼NE¼ sec.18, T.1 S., R.3 E., Maricopa County, Hydrologic Unit 15060106, in South Mountain Park, on left bank 6.5 mi south of Phoenix main post office.

DRAINAGE AREA.--1.75 mi^2.

PERIOD OF RECORD.--January 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,405.20 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 13-15. Records poor. No storage or diversion above station.

AVERAGE DISCHARGE.--24 years, 0.009 ft^3/s, 6.5 acre-ft/yr; median of yearly mean discharges, 0.00 ft^3/s, 0.0 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 670 ft^3/s Sept. 4, 1965, gage height, 9.70 ft, from floodmarks, from rating curve extended above 31 ft^3/s on basis of measurements of peak flow through culvert at gage heights 5.80, 9.09, and 9.52 ft; no flow for most of time each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 16	0115	*7.2	*2.15

No flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00	.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.006	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.4	.00	.00

CAL YR 1984 TOTAL 15.90 MEAN .043 MAX 8.0 MIN .00 AC-FT 32
WTR YR 1985 TOTAL .20 MEAN .001 MAX .20 MIN .00 AC-FT .4

09512280 CAVE CREEK BELOW COTTONWOOD WASH NEAR CAVE CREEK, AZ

LOCATION.--Lat 33°53'14", long 111°57'12", in SE¼SE¼SW¼ sec.4, T.6 N., R.4 E., Maricopa County, Hydrologic Unit 15060106, on left bank 1,500 ft downstream from Cottonwood Creek and 3.7 mi north of Cave Creek.

DRAINAGE AREA.--82.7 mi^2.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,280 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 3, Nov. 25-28, Dec. 12-16, 20, 21, 28-31, Jan. 8, 9, and Apr. 4-9. Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--5 years, 7.64 ft^3/s, 5,540 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,720 ft^3/s Nov. 30, 1982, gage height, 6.86 ft; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 19, 1980, reached a stage of 10.4 ft present datum, from flood marks, discharge, 7,020 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,470 ft^3/s Dec. 27, 1545 hours, gage height, 4.38 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.48	.90	1.5	11	5.0	3.5	2.8	1.7	.00	.00	.43	.00
2	.48	.85	1.4	7.6	4.7	3.5	2.7	1.2	.00	.00	.33	.00
3	66	.89	1.4	6.0	5.4	3.5	2.7	1.1	.00	.00	.31	.00
4	25	.97	1.7	5.1	7.1	3.4	2.7	.88	.00	.00	.29	.00
5	4.7	1.0	1.6	4.5	7.9	3.4	2.7	.81	.00	.00	.25	.00
6	2.5	1.0	1.5	4.1	8.2	3.4	2.7	.77	.00	.00	.16	.00
7	1.8	1.1	1.4	3.7	9.5	3.4	2.4	.75	.00	.00	.05	.00
8	1.2	1.1	1.8	28	13	3.4	2.2	.67	.00	.00	.00	.00
9	.97	1.2	2.4	25	22	3.3	2.2	.66	.00	.00	.00	.00
10	.78	1.2	2.1	13	29	3.3	2.2	.56	.00	.00	.00	.00
11	.66	1.3	7.8	8.6	17	3.5	2.0	.52	.00	.00	.00	.01
12	1.1	1.3	20	6.7	11	4.2	1.9	.50	.00	.00	.00	.00
13	1.0	1.4	130	5.8	9.0	3.9	1.8	.45	.00	.00	.00	.00
14	.93	1.5	28	5.0	7.6	3.6	1.7	.38	.00	.00	.00	.00
15	1.1	1.6	15	4.4	6.9	3.9	1.6	.25	.00	.00	.00	.00
16	4.1	1.8	7.9	4.1	6.5	4.3	1.5	.20	.00	.00	.00	.00
17	2.2	1.9	5.6	3.8	6.0	4.1	1.4	.17	.00	.00	.00	.00
18	1.6	1.9	4.1	3.6	5.6	3.9	1.6	.13	.00	4.6	.00	.00
19	1.5	1.9	3.2	3.6	5.3	3.9	1.8	.12	.00	1.3	.00	.57
20	1.2	1.9	32	3.5	5.1	3.8	1.8	.06	.00	.60	.00	.43
21	1.0	1.9	10	3.3	5.1	3.7	2.4	.01	.00	.73	.00	.24
22	1.0	1.9	5.7	3.3	5.2	3.4	3.2	.00	.00	.52	.00	.15
23	.88	5.9	4.0	3.3	4.9	3.4	2.4	.00	.00	.39	.00	.13
24	.92	6.4	3.1	3.3	4.6	3.3	1.8	.00	.00	.32	.00	.08
25	.90	70	2.6	3.1	4.4	3.3	1.5	.00	.00	.30	.00	.12
26	.85	13	2.4	7.3	4.3	3.3	1.4	.00	.00	.28	.00	.14
27	.89	8.9	368	17	4.0	3.1	1.8	.00	.00	.25	.00	.15
28	.92	3.5	237	12	3.5	2.9	3.3	.00	.00	.25	.00	.15
29	.92	2.5	78	7.9	---	3.5	3.1	.00	.00	.22	.00	.32
30	.92	1.8	27	5.9	---	3.5	2.1	.00	.00	.40	.00	.37
31	.92	---	16	5.7	---	3.1	---	.00	---	.53	.00	---
TOTAL	129.72	142.51	1024.2	229.2	227.8	109.7	65.4	11.89	.00	10.69	1.82	2.86
MEAN	4.18	4.75	33.0	7.39	8.14	3.54	2.18	.38	.000	.34	.059	.095
MAX	66	70	368	28	29	4.3	3.3	1.7	.00	4.6	.43	.57
MIN	.48	.85	1.4	3.1	3.5	2.9	1.4	.00	.00	.00	.00	.00
AC-FT	257	283	2030	455	452	218	130	24	.00	21	3.6	5.7

CAL YR 1984 TOTAL 2035.47 MEAN 5.56 MAX 368 MIN .00 AC-FT 4040
WTR YR 1985 TOTAL 1955.79 MEAN 5.36 MAX 368 MIN .00 AC-FT 3880

09512400 CAVE CREEK AT PHOENIX, AZ

LOCATION.--Lat 33°34'56", long 112°06'43", in SW¼ sec.24, T.3 N., R.2 E., Maricopa County, Hydrologic Unit 15060106, on downstream side of bridge at Peoria Avenue in Phoenix, 0.7 mi upstream from Arizona Canal.

DRAINAGE AREA.--252 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,236.37 ft above National Geodetic Vertical Datum of 1929 (from Salt River Valley Water Users' Association temporary bench mark). Prior to July 31, 1974, at site 60 ft upstream at datum 6.93 ft higher.

REMARKS.--Estimated daily discharges: Mar. 28 to Apr. 3 and May 2-11. Records poor. Peak flow regulated from 161 mi^2 by Cave Creek Dam 12 mi upstream. Small amounts of irrigation waste water that may flow into the channel and pass the gage are not included in this record.

AVERAGE DISCHARGE.--28 years, 3.87 ft^3/s, 2,800 acre-ft/yr; median of yearly mean discharges, 0.87 ft^3/s, 630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,080 ft^3/s - including 345 ft^3/s released from Cave Creek Dam - Dec. 19, 1967, gage height, 11.23 ft, present datum; no flow for most of time each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,030 ft^3/s, July 18, gage height, 6.25 ft; no flow for most of the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	38	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	4.9	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	62	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	127	.00	13
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	53	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.6	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	6.3	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	14	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	105	7.6	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	138	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	111	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.50	---	23	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.50	13.00	419.90	27.90	.00	.00	.00	.00	.00	246.60	.00	13.04
MEAN	.016	.43	13.5	.90	.000	.000	.000	.000	.000	7.95	.000	.43
MAX	.50	13	138	14	.00	.00	.00	.00	.00	127	.00	13
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	26	833	55	.00	.00	.00	.00	.00	489	.00	26

CAL YR 1984 TOTAL 596.00 MEAN 1.63 MAX 138 MIN .00 AC-FT 1180
WTR YR 1985 TOTAL 720.94 MEAN 1.98 MAX 138 MIN .00 AC-FT 1430

09512500 AGUA FRIA RIVER NEAR MAYER, AZ

LOCATION.--Lat 34°18'55", long 112°03'48", in NW¼SE¼ sec.20, T.11 N., R.3 E., Yavapai County, Hydrologic Unit 15070102, on left bank at Sycamore damsite, 700 ft downstream from Big Bug Creek and 12 mi southeast of Mayer.

DRAINAGE AREA.--588 mi^2.

PERIOD OF RECORD.--January 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,434 ft above National Geodetic Vertical Datum of 1929 (levels by Maricopa County Municipal Water Conservation District No. 1).

REMARKS.--Records fair except for estimated daily discharges, Oct. 1-31 and Jan. 14-22, which are poor. Diversions above station for mining and irrigation of about 600 acres. Perry Canal, which previously headed 300 ft above the gage, was washed out on July 11, 1977, and was not rebuilt.

AVERAGE DISCHARGE.--45 years, 22.8 ft^3/s, 16,520 acre-ft/yr; median of yearly mean discharges, 13 ft^3/s, 9,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,100 ft^3/s Feb. 19, 1980, from rating curve extended above 3,400 ft^3/s on basis of slope-area measurement of peak flow, gage height, 15.76 ft, from mean of surge, inside high-water mark 16.03 ft, floodmark 18.97 ft; negligible flow at times during the summer months in most previous years when entire flow was diverted to Perry Canal above station and flow past gage was seepage only.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	1930	*2,880	6.16

Minimum daily discharge, 0.80 ft^3/s, Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	4.9	8.9	28	16	12	17	6.6	3.0	1.2	1.1	2.2
2	5.0	4.9	8.9	20	16	11	16	5.9	2.9	1.2	1.1	2.2
3	8.0	4.9	9.1	19	18	11	16	5.5	2.9	1.2	1.1	2.1
4	18	4.9	9.2	17	18	9.4	16	5.3	2.9	1.4	1.0	2.1
5	10	4.9	8.9	17	13	7.8	14	5.3	2.9	1.4	1.0	2.1
6	8.0	4.9	8.7	16	13	6.4	13	5.1	2.4	1.2	.80	2.2
7	7.0	4.9	8.5	16	12	5.3	12	5.1	2.2	1.2	12	2.2
8	6.5	5.0	9.5	18	13	4.9	11	5.1	2.1	1.4	6.9	2.2
9	6.0	5.1	9.0	46	15	4.8	11	5.5	2.0	1.4	1.2	2.1
10	6.0	5.2	9.3	23	49	4.9	12	5.3	1.9	1.4	1.2	2.1
11	5.5	5.2	10	18	47	8.2	11	5.5	1.9	1.4	1.1	2.2
12	5.5	5.2	16	16	28	9.2	9.6	5.5	2.0	1.6	1.1	2.2
13	5.0	5.3	67	16	39	7.8	9.2	5.5	2.0	1.6	1.1	2.2
14	5.0	5.7	56	15	54	8.7	8.7	5.3	2.1	1.8	1.0	2.2
15	5.0	5.7	27	15	39	15	8.1	5.1	2.1	2.0	1.0	2.2
16	5.0	5.8	18	14	31	65	8.4	5.0	1.9	7.3	1.0	2.2
17	5.0	5.6	14	14	29	119	8.2	5.1	1.9	2.2	1.0	2.2
18	5.0	5.7	13	14	27	86	8.0	5.0	1.9	4.7	1.0	14
19	5.0	7.5	21	13	19	98	8.5	4.8	1.8	3.5	1.2	4.2
20	5.0	6.8	90	13	16	111	8.9	4.6	1.8	5.3	2.1	2.8
21	4.9	6.7	37	13	27	104	12	4.6	1.8	1.6	2.1	2.8
22	4.9	7.0	17	12	52	86	12	4.6	1.7	1.4	2.1	2.6
23	4.9	16	14	12	50	66	9.8	4.4	1.7	1.3	2.0	2.6
24	4.9	10	10	12	32	52	8.5	4.2	1.7	1.4	2.0	2.4
25	4.9	12	7.2	12	26	42	8.5	4.0	1.7	1.4	2.0	2.4
26	4.9	11	5.9	13	20	35	9.4	3.8	1.4	1.3	2.1	2.4
27	4.9	10	804	14	16	28	11	3.5	1.2	1.3	2.1	2.6
28	4.9	10	1040	21	13	25	14	3.3	1.2	1.4	2.1	2.6
29	4.9	9.9	347	50	---	26	11	3.2	1.4	12	2.1	2.4
30	4.9	9.2	124	34	---	22	8.1	3.3	1.2	24	4.8	3.2
31	4.9	---	60	22	---	20	---	3.3	---	1.2	2.6	---
TOTAL	184.4	209.9	2888.1	583	748	1111.4	330.9	148.3	59.6	92.7	65.00	83.9
MEAN	5.95	7.00	93.2	18.8	26.7	35.9	11.0	4.78	1.99	2.99	2.10	2.80
MAX	18	16	1040	50	54	119	17	6.6	3.0	24	12	14
MIN	4.9	4.9	5.9	12	12	4.8	8.0	3.2	1.2	1.2	.80	2.1
AC-FT	366	416	5730	1160	1480	2200	656	294	118	184	129	166

CAL YR 1984 TOTAL 8704.6 MEAN 23.8 MAX 1040 MIN 2.9 AC-FT 17270
WTR YR 1985 TOTAL 6505.20 MEAN 17.8 MAX 1040 MIN .80 AC-FT 12900

09512600 TURKEY CREEK NEAR CLEATOR, AZ

LOCATION.--Lat 34°16'56", long 112°12'25", in SW¼SW¼SE¼ sec.36, T.11 N., R.1 E. (unsurveyed), Yavapai County, Hydrologic Unit 15070102, in Prescott National Forest, on right bank 0.7 mi upstream from Forest Route 259, 1.5 mi east of Cleator, and 9.3 mi south of Mayer.

DRAINAGE AREA.--89.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,140 ft above National Geodetic Vertical Datum of 1929], from topographic map.

REMARKS.--Records fair except for estimated daily discharges, Nov. 29, 30, Dec. 13, 14, 21, which are poor.

AVERAGE DISCHARGE.--6 years, 17.8 ft^3/s, 12,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,230 ft^3/s Feb. 19, 1980, gage height, 11.51 ft, from rating curve extended above 1,500 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 5, 1970, reached a stage of about 16 ft, from floodmarks, discharge, about 9,000 ft^3/s, from rating curve extended above 1,500 ft^3/s on basis of slope-area measurement at gage height 11.51 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 27	1830	*648	*3.73

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.09	.33	27	15	32	11	6.0	.26	.00	.51	.00
2	.15	.10	.30	18	15	30	10	5.5	.25	.00	.12	.00
3	1.0	.10	.30	15	18	26	9.6	4.8	.23	.00	.00	.00
4	7.8	.10	.26	14	16	22	9.1	4.3	.20	.00	.00	.00
5	.75	.10	.26	12	14	20	9.5	3.9	16	.00	.00	.00
6	.37	.10	.26	12	16	18	9.4	3.5	11	.00	.00	.00
7	.24	.10	.24	10	16	16	8.6	3.1	.06	.00	.78	.00
8	.20	.10	.30	21	17	15	8.6	2.9	.02	.00	.33	.00
9	.17	.10	.51	31	21	14	8.6	2.7	.00	.00	.00	.00
10	.14	.10	.68	22	33	23	8.0	2.4	.00	.00	.00	.00
11	.14	.10	12	17	30	41	7.3	2.3	.00	.00	.00	.00
12	.14	.10	27	15	28	35	6.8	2.1	.00	.00	.00	.00
13	.14	.10	22	15	33	24	6.2	2.0	.00	.00	.00	.00
14	.14	.10	17	15	43	20	5.9	1.7	.00	.00	.00	.00
15	.14	.10	13	14	42	23	5.2	1.7	.00	.00	.00	.00
16	.12	.10	10	12	43	27	4.9	1.4	.00	.00	.00	.00
17	.12	.10	10	11	46	28	4.7	1.2	.00	.00	.00	.00
18	.12	.10	11	10	43	23	4.7	1.4	.00	1.4	.00	.00
19	.12	.10	10	10	37	26	4.7	1.2	.00	2.1	.00	.00
20	.12	.11	17	10	38	27	4.9	.95	.00	1.2	.00	.00
21	.12	.10	16	11	55	25	8.6	.83	.00	8.2	.00	.00
22	.12	.10	15	12	64	21	9.4	.83	.00	3.3	.00	.00
23	.12	.62	12	12	56	19	7.7	.78	.00	.75	.00	.00
24	.12	1.0	10	13	45	17	6.8	.65	.00	.12	.00	.00
25	.12	3.3	9.1	13	39	15	6.0	.60	.00	.00	.00	.00
26	.12	3.3	9.1	19	39	15	5.6	.48	.00	.00	.00	.00
27	.12	.91	205	22	37	14	6.2	.38	.00	.00	.00	.00
28	.12	.51	305	22	33	14	9.8	.35	.00	.00	.00	.00
29	.12	.40	138	22	---	13	8.5	.31	.00	.00	.00	.00
30	.12	.30	57	22	---	13	6.8	.31	.00	2.5	.00	.00
31	.11	---	38	17	---	12	---	.28	---	1.7	.00	---
TOTAL	13.61	12.54	966.64	496	932	668	223.1	60.85	28.02	21.27	1.74	.00
MEAN	.44	.42	31.2	16.0	33.3	21.5	7.44	1.96	.93	.69	.056	.000
MAX	7.8	3.3	305	31	64	41	11	6.0	16	8.2	.78	.00
MIN	.11	.09	.24	10	14	12	4.7	.28	.00	.00	.00	.00
AC-FT	27	25	1920	984	1850	1320	443	121	56	42	3.5	.00

CAL YR 1984 TOTAL 1914.63 MEAN 5.23 MAX 305 MIN .00 AC-FT 3800
WTR YR 1985 TOTAL 3423.77 MEAN 9.38 MAX 305 MIN .00 AC-FT 6790

09512800 AGUA FRIA RIVER NEAR ROCK SPRINGS, AZ

LOCATION.--Lat 34°00'56", long 112°10'02", in NW¼NW¼ sec.28, T.8 N., R.2 E., Yavapai County, Hydrologic Unit 15070102, on right bank 2.5 mi southwest of Rock Springs and 10 mi upstream from Lake Pleasant.

DRAINAGE AREA.--1,130 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1970 to current year (monthly discharge only, October 1973 to September 1974). Low-flow records not equivalent prior to Oct. 1, 1974, due to spring flow in streambed between sites in use.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,800 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1974, at site 600 ft upstream at datum 10.00 ft higher (now used as supplementary gage).

REMARKS.--Estimated daily discharges: Mar. 6, 7, Aug. 8-27. Records fair.

AVERAGE DISCHARGE.--15 years, 96.9 ft^3/s, 70,200 acre-ft/yr; median of yearly mean discharges, 54 ft^3/s, 39,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,500 ft^3/s Feb. 19, 1980, gage height, 21.08 ft recorded, 28.15 ft from floodmark, from rating curve extended above 21,000 ft^3/s on basis of slope-area measurement at gage height 27.2 ft; no flow at times each year prior to October 1974; since October 1974, no flow May 27 to July 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	0200	*4,560	*a11.88
July 18	0600	1,840	9.22

a From crest-stage gage.
Minimum daily discharge, 0.68 ft^3/s July 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	4.0	13	230	82	115	47	26	2.7	.76	18	10
2	4.0	3.8	13	161	69	111	44	19	2.5	.68	8.7	6.0
3	92	3.7	12	119	82	106	38	14	2.9	.73	7.1	2.4
4	20	3.7	12	96	93	101	37	11	2.7	.74	7.0	2.1
5	12	3.6	12	80	96	89	35	10	2.4	.70	6.9	2.1
6	12	3.6	12	70	87	81	29	10	2.4	.74	7.0	2.1
7	8.2	3.6	11	63	92	74	29	10	2.4	.69	91	2.1
8	6.8	3.6	11	105	99	65	28	9.2	2.3	.70	99	2.0
9	5.6	3.6	11	232	122	65	25	7.8	2.0	.81	29	2.0
10	4.8	3.6	9.8	158	157	56	22	7.0	2.0	.95	4.2	2.0
11	4.4	3.6	15	116	188	70	22	6.2	2.0	.96	2.2	2.0
12	4.2	3.6	102	97	165	92	21	7.2	2.0	.92	1.9	1.9
13	4.0	3.6	266	85	152	85	20	8.0	2.0	.88	1.7	1.9
14	4.0	3.6	234	74	176	74	19	7.5	1.6	.83	1.7	1.9
15	4.1	3.6	145	66	185	68	16	6.3	1.2	.79	1.7	1.9
16	4.1	4.0	102	60	174	83	14	5.6	1.2	1.7	1.7	1.9
17	4.2	4.0	80	54	168	118	13	5.5	1.3	1.6	1.9	1.8
18	4.4	4.0	72	49	161	109	13	5.2	1.4	229	1.9	20
19	4.8	4.4	74	46	148	102	13	4.5	1.5	21	1.9	6.8
20	4.9	4.6	145	44	139	103	12	3.7	1.6	10	1.9	8.8
21	5.5	5.0	231	43	157	107	13	3.5	1.2	7.6	1.9	5.0
22	5.9	5.2	141	43	222	99	18	2.9	1.2	4.2	1.9	3.3
23	6.1	11	101	43	221	87	22	3.2	1.2	3.6	1.9	2.5
24	6.0	28	81	42	191	78	21	3.2	1.3	3.5	1.9	1.8
25	6.0	41	69	42	164	74	21	3.2	1.4	3.4	1.9	2.7
26	5.6	33	61	50	150	64	18	2.6	1.7	3.3	1.9	3.0
27	5.2	26	736	95	137	61	18	2.5	.91	3.4	1.9	3.1
28	5.1	20	2850	94	123	57	24	2.3	.72	3.6	1.6	3.3
29	5.0	16	1530	95	---	55	28	2.7	.70	3.6	1.4	3.5
30	5.0	14	628	108	---	56	29	2.5	.71	12	1.3	3.4
31	4.6	---	345	103	---	53	---	2.5	---	63	1.2	---
TOTAL	272.5	275.0	8124.8	2763	4000	2558	709	214.8	51.14	386.38	315.2	113.3
MEAN	8.79	9.17	262	89.1	143	82.5	23.6	6.93	1.70	12.5	10.2	3.78
MAX	92	41	2850	232	222	118	47	26	2.9	229	99	20
MIN	4.0	3.6	9.8	42	69	53	12	2.3	.70	.68	1.2	1.8
AC-FT	541	545	16120	5480	7930	5070	1410	426	101	766	625	225

CAL YR 1984 TOTAL 16124.05 MEAN 44.1 MAX 2850 MIN .80 AC-FT 31980
WTR YR 1985 TOTAL 19783.12 MEAN 54.2 MAX 2850 MIN .68 AC-FT 39240

09512800 AGUA FRIA RIVER NEAR ROCK SPRINGS, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1982 to current year.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 1984												
23...	1210	6.1	600	8.49	24.5	20.0	3.5	712	9.2	109	K7	K20
NOV												
27...	1205	25	660	7.90	13.5	10.0	26	722	10.8	101	70	240
DEC												
18...	1045	65	548	8.08	12.0	9.5	5.9	716	11.2	--	30	96
FEB 1985												
01...	1035	80	498	8.45	5.0	3.5	46	716	12.6	--	K3	45
MAR												
07...	1035	71	491	8.50	14.0	11.0	1.5	716	10.3	100	<1	K2
28...	1100	57	553	8.50	16.0	14.5	1.9	710	10.2	108	<1	K2
APR												
23...	1010	28	592	8.58	24.0	18.0	1.5	716	9.5	107	K8	20
MAY												
29...	0930	2.3	640	8.41	28.5	22.5	1.2	713	8.3	103	K11	21
JUN												
26...	0940	2.3	652	8.20	30.0	22.0	--	716	8.8	108	39	61
JUL												
16...	1200	1.7	620	8.30	33.0	30.0	1.0	710	7.1	--	K23	71
AUG												
27...	1115	2.0	640	8.40	35.0	29.0	25	715	7.4	--	32	310
SEP												
25...	1035	2.6	639	8.35	28.5	23.0	6.6	713	8.3	104	170	160

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 1984											
23...	260	33	56	28	48	1	2.4	--	--	222	92
NOV											
27...	260	0	60	27	44	1	2.1	--	--	278	73
DEC											
18...	220	35	50	22	35	1	1.7	--	--	180	60
FEB 1985											
01...	200	27	47	21	29	0.9	1.4	214	1.0	176	57
MAR											
07...	200	12	47	20	33	1	1.5	205	12	186	58
28...	230	33	54	23	35	1	1.6	212	14	200	68
APR											
23...	230	12	51	24	42	1	2.0	256	2.0	213	71
MAY											
29...	240	28	56	25	47	1	2.2	238	12	207	88
JUN											
26...	230	32	54	24	47	1	2.6	246	0	202	86
JUL											
16...	--	--	--	24	48	--	2.6	--	--	180	91
AUG											
27...	240	14	56	24	49	1	2.9	--	--	225	84
SEP											
25...	230	19	53	24	46	1	2.6	244	7.0	212	81

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09512800 AGUA FRIA RIVER NEAR ROCK SPRINGS, AZ--Continued

WATER QUALITY DATA

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)
OCT 1984 23...	37	0.4	28	383	430	0.52	<0.10	<0.10	<0.2	0.08	0.06
NOV 27...	36	0.4	27	403	440	0.55	<0.10	<0.10	0.2	0.15	0.06
DEC 18...	25	0.3	24	320	330	0.44	<0.10	<0.10	0.3	0.10	0.04
FEB 1985 01...	21	0.3	22	300	310	0.41	<0.10	<0.10	0.2	0.05	0.04
MAR 07...	19	0.3	22	284	330	0.39	<0.10	<0.10	0.5	0.04	<0.01
28...	25	0.3	23	347	360	0.47	<0.10	<0.10	0.7	0.04	0.02
APR 23...	29	0.4	21	366	370	0.5	<0.10	<0.10	0.6	0.03	0.04
MAY 29...	34	0.4	24	384	420	0.52	<0.10	<0.10	0.5	0.06	0.05
JUN 26...	34	0.4	27	391	400	0.53	<0.10	<0.10	0.2	0.05	0.06
JUL 16...	36	0.4	29	393	--	--	<0.10	<0.10	0.5	0.03	0.03
AUG 27...	37	0.4	29	388	420	0.53	<0.10	<0.10	0.3	0.06	0.07
SEP 25...	37	0.4	27	396	410	0.54	<0.10	<0.10	0.3	0.06	0.04

DATE	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)
OCT 1984 23...	0.06	0.18	14	<100	200	160	<1	4	14	480	6
NOV 27...	0.05	0.15	13	<100	160	110	<1	150	19	4200	6
DEC 18...	0.04	0.12	8	200	120	90	<1	17	5	630	17
FEB 1985 01...	0.04	0.12	9	200	100	70	<1	2	9	530	10
MAR 07...	0.02	0.06	6	200	90	70	<1	4	5	120	7
28...	0.04	0.12	10	100	120	80	<1	<1	10	200	<3
APR 23...	0.03	0.09	12	300	120	120	<1	<1	6	190	3
MAY 29...	0.04	0.12	14	400	150	140	1	2	9	70	3
JUN 26...	0.04	0.12	13	<100	160	130	<1	2	4	60	6
JUL 16...	0.03	0.09	15	<100	100	90	1	9	4	60	5
AUG 27...	0.04	0.12	18	<100	180	160	<1	8	10	2000	6
SEP 25...	0.02	0.06	16	<100	190	160	<1	9	5	590	<3

< Actual value is known to be less than value shown.

09512800 AGUA FRIA RIVER NEAR ROCK SPRINGS, AZ--Continued

WATER QUALITY DATA

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1984											
23...	5	100	<0.1	<1	<1	150	1.8	0.4	<0.01	2	0.03
NOV											
27...	3	210	0.1	<1	1	40	4.4	0.6	0.01	32	2.2
DEC											
18...	1	60	0.3	<1	1	<10	3.2	0.3	0.01	11	1.9
FEB 1985											
01...	<1	30	<0.1	<1	<1	10	3.4	0.1	<0.01	6	1.3
MAR											
07...	1	10	<0.1	<1	<1	<10	2.4	0.2	<0.01	3	0.58
28...	2	10	0.1	<1	<1	<10	1.8	0.3	<0.01	3	0.46
APR											
23...	1	20	<0.1	<1	<1	<20	2.4	0.2	<0.01	6	0.45
MAY											
29...	10	20	<0.1	<1	<1	10	1.4	0.4	<0.01	0	0.0
JUN											
26...	1	20	<0.1	<1	<1	<10	1.7	0.3	<0.01	2	0.01
JUL											
16...	<1	20	0.1	<1	<1	30	--	0.4	--	2	0.01
AUG											
27...	4	140	<0.1	<1	<1	20	1.7	0.5	<0.01	94	0.49
SEP											
25...	1	80	<0.1	<1	<1	<10	1.3	2.9	<0.01	14	0.1

< Actual value is known to be less than value shown.

09512830 BOULDER CREEK NEAR ROCK SPRINGS, AZ

LOCATION.--Lat 33°59'55", long 112°12'57", in SE¼NW¼NW¼ sec.36, T.8 N., R1 E., Yavapai County, Hydrologic Unit 15070102, on left bank 2.2 mi upstream from Agua Fria River, 1.5 mi southwest of Rock Springs, and 7.1 mi northwest of New River.

DRAINAGE AREA.--37.8 mi^2.

PERIOD OF RECORD.--May 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,890 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 7 to Jan. 23. Records fair except those for periods of estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 239 ft^3/s Dec. 27, 1984, gage height, 3.31 ft (high-water marks in vicinity of gage); minimum daily, 0.01 ft^3/s, many days in 1985 water year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 239 ft^3/s Dec. 27, gage height, 3.31 ft (high-water marks in vicinity of gage); minimum daily, 0.01 ft^3/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.14	.18	27	7.0	8.5	1.9	.56	.12	.02	.01	.02
2	.16	.14	.18	19	6.6	7.5	1.7	.56	.12	.03	.01	.02
3	.16	.14	.18	15	9.3	6.7	1.6	.51	.12	.04	.01	.02
4	.16	.14	.18	12	11	6.1	1.3	.41	.10	.06	.01	.02
5	.16	.14	.18	9.0	11	5.3	1.1	.35	.11	.05	.01	.02
6	.16	.12	.18	7.5	11	3.6	.96	.34	.10	.04	.01	.02
7	.16	.14	.18	6.5	13	4.4	.84	.31	.09	.04	.10	.02
8	.16	.14	.20	70	17	3.8	.84	.31	.09	.02	4.2	.02
9	.14	.14	.20	60	23	3.5	.74	.31	.09	.02	.39	.03
10	.14	.14	.20	33	28	3.4	.58	.31	.07	.02	.10	.03
11	.14	.14	.32	26	25	3.4	.49	.31	.06	.02	.06	.02
12	.14	.14	.48	20	24	3.9	.43	.30	.06	.01	.06	.02
13	.14	.14	20	16	27	3.9	.35	.27	.06	.01	.06	.02
14	.14	.14	10	14	27	3.0	.28	.27	.06	.02	.04	.02
15	.14	.14	7.0	12	23	2.8	.26	.23	.06	.02	.04	.02
16	.14	.14	5.0	10	19	4.5	.26	.23	.05	.02	.03	.02
17	.14	.14	4.0	8.0	17	6.0	.24	.23	.05	.02	.03	.02
18	.14	.14	4.0	7.5	14	5.3	.23	.23	.05	.04	.03	.10
19	.14	.14	6.0	6.0	12	4.3	.25	.20	.05	.03	.03	.06
20	.12	.14	7.0	6.0	11	4.5	.25	.19	.05	.02	.03	.05
21	.12	.14	16	5.0	18	4.7	.31	.18	.03	.02	.03	.05
22	.10	.14	16	5.0	31	3.9	.28	.18	.03	.01	.03	.05
23	.10	.23	10	4.6	21	3.5	.27	.18	.03	.01	.03	.05
24	.10	.23	6.0	4.4	18	3.1	.27	.18	.03	.01	.03	.05
25	.10	.32	5.0	4.2	15	2.8	.29	.17	.03	.01	.03	.05
26	.10	.23	3.6	6.4	13	2.6	.27	.16	.03	.01	.02	.05
27	.12	.18	100	14	11	2.4	.30	.14	.02	.01	.02	.03
28	.14	.18	150	11	9.6	2.2	.42	.12	.02	.01	.02	.03
29	.14	.18	100	9.8	---	2.1	.38	.12	.02	.01	.02	.03
30	.14	.18	64	12	---	2.1	.32	.12	.02	.02	.02	.03
31	.14	---	40	9.0	---	2.0	---	.12	---	.01	.02	---
TOTAL	4.24	4.79	576.26	469.9	472.5	125.8	17.71	8.10	1.82	.68	5.53	.99
MEAN	.137	.160	18.6	15.2	16.9	4.06	.59	.26	.06	.02	.18	.03
MAX	.16	.32	150	70	31	8.5	1.9	.56	.12	.06	4.2	.10
MIN	.10	.12	.18	4.2	6.6	2.0	.23	.12	.02	.01	.01	.02
AC-FT	8.4	9.5	1140	932	937	250	35	16	3.6	1.3	11	2.0

CAL YR 1984 TOTAL 703.70 MEAN 1.92 MAX 150 MIN .10 AC-FT 1400
WTR YR 1985 TOTAL 1688.32 MEAN 4.63 MAX 150 MIN .01 AC-FT 3350

09512860 HUMBUG CREEK NEAR CASTLE HOT SPRINGS, AZ

LOCATION.--Lat 33°58'02", long 112°17'34", in NW¼SE¼NE¼ sec.7, T.7 N., R.1 E., Yavapai County, Hydrologic Unit 15070102, on right bank, 0.5 mi downstream from mouth of Cow Creek, 3.0 mi upstream from Lake Pleasant, and 4.0 mi southeast of Castle Hot Springs.

DRAINAGE AREA.--59.9 mi^2.

PERIOD OF RECORD.--May 17, 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 29. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,030 ft^3/s, Aug. 7, 1985, gage height 7.36 ft, result of a slope-area measurement; minimum daily, 0.01 ft^3/s July 13, 14, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,030 ft^3/s Aug. 7, 2215 hours, gage height 7.36 ft, result of a slope-area measurement; minimum daily, 0.01 ft^3/s July 13, 14..

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.32	.36	32	6.8	18	4.2	.93	.15	.03	.08	.10
2	.30	.33	.34	16	3.9	17	3.7	.60	.14	.02	.08	.10
3	.38	.33	.36	7.7	16	14	3.2	.49	.14	.02	.08	.11
4	.44	.33	.36	3.7	27	11	2.7	.40	.13	.02	.07	.13
5	.42	.29	.36	2.5	20	7.8	2.5	.34	.12	.02	.06	.15
6	.35	.26	.34	2.0	11	8.8	2.5	.32	.12	.02	.04	.15
7	.31	.27	.31	1.8	11	7.8	1.8	.30	.12	.02	104	.15
8	.27	.27	.50	71	13	4.8	1.8	.30	.11	.02	43	.15
9	.26	.27	.42	64	14	3.7	1.8	.29	.10	.02	.36	.13
10	.25	.27	.48	37	21	3.7	2.0	.28	.09	.02	.20	.13
11	.25	.28	1.3	26	19	6.0	1.7	.23	.09	.02	.15	.13
12	.25	.28	.96	17	18	10	1.5	.23	.09	.02	.13	.13
13	.24	.28	50	14	21	6.0	1.4	.20	.09	.01	.11	.13
14	.25	.27	12	10	22	4.8	1.2	.20	.09	.01	.10	.13
15	.25	.27	1.4	7.8	22	5.3	.98	.20	.09	.02	.08	.13
16	.25	.27	1.4	6.0	19	13	.91	.20	.08	.86	.08	.13
17	.27	.29	1.2	4.2	18	12	.82	.20	.08	.08	.10	.13
18	.26	.31	1.1	3.2	17	8.8	.74	.17	.07	.13	.11	20
19	.28	.33	1.3	2.9	17	7.8	.85	.17	.07	.13	.15	2.7
20	.29	.30	14	2.7	18	11	1.0	.19	.07	.13	.15	.15
21	.30	.31	24	2.7	55	8.8	1.2	.19	.07	.11	.15	.13
22	.30	.40	12	2.4	52	7.8	1.8	.19	.06	.11	.13	.11
23	.30	.61	6.2	2.4	38	6.0	1.5	.18	.06	.11	.10	.10
24	.31	.45	3.7	2.9	32	4.8	.94	.18	.08	.10	.08	.10
25	.29	1.8	2.8	2.9	26	4.8	.72	.16	.09	.10	.08	.08
26	.30	.50	2.3	7.1	22	4.2	.61	.16	.09	.08	.08	.08
27	.31	.41	192	18	19	3.7	.77	.15	.07	.08	.15	.11
28	.32	.39	301	13	18	4.8	1.5	.15	.07	.08	.17	.13
29	.32	.36	216	12	---	6.0	1.8	.15	.07	.08	.15	.13
30	.32	.31	106	12	---	6.0	1.2	.16	.06	.10	.10	.11
31	.32	---	56	10	---	4.8	---	.16	---	.08	.10	---
TOTAL	9.26	11.36	1010.49	416.9	596.7	243.0	49.34	8.07	2.76	2.65	150.42	26.14
MEAN	.30	.38	32.6	13.4	21.3	7.84	1.64	.26	.09	.08	4.85	.87
MAX	.44	1.8	301	71	55	18	4.2	.93	.15	.86	104	20
MIN	.24	.26	.31	1.8	3.9	3.7	.61	.15	.06	.01	.04	.08
AC-FT	18	23	2000	827	1180	482	98	16	5.5	5.3	298	52

CAL YR 1984 TOTAL 1211.09 MEAN 3.31 MAX 301 MIN .08 AC-FT 2400
WTR YR 1985 TOTAL 2527.09 MEAN 6.92 MAX 301 MIN .01 AC-FT 5010

09512970 COTTONWOOD CREEK NEAR WADDELL DAM, AZ

LOCATION.--Lat 33°53'55", long 112°18'39", in SE¼SW¼SE¼ sec.34, T.7 N., R.1 W., Yavapai County Hydrologic Unit 15070102, on the left bank 4 mi northwest of Waddell Dam and 1 mi upstream from the mouth at Lake Pleasant.

DRAINAGE AREA.--9.28 mi^2.

PERIOD OF RECORD.--May 1983 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 1,660 ft above National Geodetic Vertical Datum of 1929 from topographic map.

REMARKS.--Estimated daily discharge: Oct. 1-19, May 19-30, and Sept. 6-30. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40 ft^3/s, Sept. 23, 1983, gage height 2.60 ft; no flow for many days in 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 2.8 ft^3/s, July 21, gage height 0.93 ft, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.14	.64	.15	.21	.04	.04	.03	.01	.00	.00
2	.01	.00	.13	.53	.15	.18	.04	.04	.03	.01	.00	.00
3	.01	.00	.15	.13	.15	.18	.04	.04	.03	.01	.00	.00
4	.01	.00	.15	.28	.15	.16	.00	.04	.03	.01	.00	.00
5	.01	.00	.17	.28	.15	.17	.00	.04	.03	.01	.00	.00
6	.01	.00	.15	.28	.15	.12	.00	.04	.02	.01	.00	.00
7	.01	.00	.09	.28	.15	.13	.00	.04	.02	.01	.00	.00
8	.01	.00	.03	1.3	.15	.20	.00	.04	.02	.01	.00	.00
9	.01	.00	.01	.90	.15	.24	.00	.04	.02	.01	.00	.00
10	.01	.00	.04	.57	.15	.19	.00	.04	.02	.01	.00	.00
11	.01	.00	.14	.49	.15	.19	.00	.04	.02	.00	.00	.00
12	.01	.00	.05	.42	.15	.24	.04	.04	.02	.00	.00	.00
13	.01	.00	.22	.42	.15	.16	.01	.04	.02	.00	.00	.00
14	.01	.00	.22	.42	.15	.16	.01	.04	.02	.00	.00	.00
15	.01	.00	.12	.42	.15	.16	.04	.04	.02	.00	.00	.00
16	.00	.00	.08	.42	.15	.16	.04	.03	.02	.00	.00	.00
17	.00	.00	.06	.42	.15	.13	.04	.03	.02	.00	.00	.00
18	.00	.00	.06	.42	.15	.13	.04	.03	.02	.00	.00	.00
19	.00	.00	.06	.42	.15	.13	.04	.03	.02	.00	.00	.00
20	.00	.00	.08	.42	.15	.12	.09	.03	.02	.00	.00	.00
21	.00	.00	.08	.42	.57	.15	.09	.03	.02	.00	.00	.00
22	.00	.01	.09	.42	.42	.09	.09	.03	.02	.00	.00	.00
23	.00	.04	.09	.42	.28	.09	.04	.03	.02	.00	.00	.00
24	.00	.00	.11	.49	.22	.09	.04	.03	.02	.00	.00	.00
25	.00	.04	.16	.57	.20	.09	.04	.03	.02	.00	.00	.00
26	.00	.01	.17	.44	.19	.09	.04	.03	.01	.00	.00	.00
27	.00	.01	4.5	.39	.14	.09	.04	.03	.01	.00	.00	.00
28	.00	.02	7.3	.37	.20	.09	.04	.03	.01	.00	.00	.00
29	.00	.01	4.8	.36	---	.09	.04	.03	.01	.00	.00	.00
30	.04	.15	1.4	.32	---	.09	.04	.03	.01	.00	.00	.00
31	.04	---	1.0	.32	---	.04	---	.03	---	.00	.00	---
TOTAL	.23	.29	21.85	13.98	5.22	4.36	.97	1.08	.60	.10	.00	.00
MEAN	.007	.010	.70	.45	.19	.14	.032	.035	.020	.003	.000	.000
MAX	.04	.15	7.3	1.3	.57	.24	.09	.04	.03	.01	.00	.00
MIN	.00	.00	.01	.13	.14	.04	.00	.03	.01	.00	.00	.00
AC-FT	.5	.6	43	28	10	8.6	1.9	2.1	1.2	.2	.00	.00

CAL YR 1984 TOTAL 71.23 MEAN .19 MAX 7.3 MIN .00 AC-FT 141
WTR YR 1985 TOTAL 48.68 MEAN .13 MAX 7.3 MIN .00 AC-FT 97

09513000 AGUA FRIA RIVER AT WADDELL DAM, AZ

LOCATION.--Lat 33°51'20", long 112°15'58", in SW¼ sec.16, T.6 N., R.1 E., Maricopa County, Hydrologic Unit 15070102, at left upstream end of Waddell Dam, and 22 mi northwest of Glendale.

DRAINAGE AREA.--1,459 mi^2.

PERIOD OF RECORD.--November 1910 to September 1914 (gage heights only), October 1914 to September 1919, October 1919 to September 1924 (gage heights only), October 1933 to current year (monthly discharge only). Published as "near Glendale" prior to 1920, and as "at Lake Pleasant Dam" 1920 to September 1962.

REVISED RECORDS.--WSP 1213: 1915-16, 1918-19. WSP 1343: Drainage area. WSP 1513: 1956.

GAGE.--Nonrecording gage on Lake Pleasant read once daily. Datum of gage is 1,431.2 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1924, nonrecording gage or water-stage recorder at several sites in the vicinity of diversion dam 1.5 mi downstream from Waddell Dam, at different datum.

REMARKS.--Records good. Figures given herein represent flow into Lake Pleasant. Inflow computed on basis of three factors as follows: 1. Change in contents of Lake Pleasant and in contents of small reservoir behind diversion dam 1.5 mi downstream from Lake Pleasant. 2. (a) Release from Lake Pleasant, computed from twice-daily readings by Clausen-Pierce weir rule in Beardsley Canal, checked by current-meter measurements by U.S. Geological Survey. (b) Spill from Lake Pleasant, measured over diversion dam based on staff-gage readings. See tables of diversions and spill below. 3. Effect of rainfall and evaporation on lake; evaporation assumed as 0.85 of that measured once daily in 3-ft-square land pan buried 1 ft in ground near left end of Waddell Dam. Effect of bank storage and bank release in Lake Pleasant is not taken into account. For months when inflow to lake is small and other factors relatively large, discordant figures of runoff may appear. Such discrepancies that may be attributed to inaccuracies in the capacity table, or to the fact that bank storage and bank release are not taken into account, result in quantities too large for periods of falling stage, but tend to be compensated for by quantites too small for periods of rising stage. Inaccuracies in figures of release and evaporation, which may be within reasonable limits within themselves, may result in disproportionately large inaccuracies in small figures of inflow computed as residuals. Diversions for irrigation above Lake Pleasant of probably not over 1,000 acres. Spill occurred in 1941, 1966, 1968, 1978, 1979, 1980, and 1983 water years.

COOPERATION.--Records collected and prepared in cooperation with Maricopa County Municipal Water Conservation District No. 1.

AVERAGE DISCHARGE.--57 years (water years 1915-19, 1934-85), 99.0 ft^3/s, 71,730 acre-ft/yr; median of yearly mean discharges, 41 ft^3/s, 29,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 105,000 ft^3/s Jan. 28, 1916, gage height, 30 ft, same datum as in 1919, from floodmarks, Nov. 27, 1919, gage height, 33 ft, datum then in use, from floodmarks, from rating curve extended above 13,000 ft^3/s on basis of velocity-area studies (on basis of comparative gage heights, the flood of Nov. 27, 1919, is believed to have been the greater); no flow during spring and summer of several years.

MONTHLY INFLOW TO LAKE PLEASANT; SPILL AND DIVERSIONS BELOW LAKE PLEASANT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	Inflow to Lake Pleasant		Diversions in acre-feet	Spill in acre-feet
	Mean (cfs)	Runoff in acre-feet		
October	2.75	169	0	0
November	7.06	420	0	0
December	326	20,070	0	0
CAL YR 1984	58.9	42,789	46,430	0
January	124	7,610	0	0
February	175	9,720	0	0
March	104	6,410	4,420	0
April	37.3	2,220	6,660	0
May	20.2	1,240	5,030	0
June	20.2	1,200	8,280	0
July	28.0	1,720	10,200	0
August	27.3	1,680	10,580	0
September	11.0	655	3,960	0
WTR YR 1985	73.4	53,114	49,130	0

09513500 LAKE PLEASANT AT WADDELL DAM, AZ

LOCATION.--Lat 35°51'20", long 112°15'58", in SW¼ sec.16, T.6 N., R.1 E., Maricopa County, Hydrologic Unit 15070102, at left upstream end of Waddell Dam on Agua Fria River.

DRAINAGE AREA.--1,459 mi^2.

PERIOD OF RECORD.--February 1928 to current year (annual figures only prior to 1939). Prior to October 1963 published as "at Lake Pleasant Dam."

GAGE.--Nonrecording gage read once daily. Datum of gage is 1,431.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by concrete multiple-arch dam; dam completed and storage began in 1927. Capacity, 157,200 acre-ft, of which 84,300 acre-ft is between gage heights 66 ft - 32 ft above centerline of outlet works - and 146.0 ft, crest of spillway, and 72,900 acre-ft between 146.0 ft and 170.0 ft, top of spillway gates. At times, capacity is greater due to trash build-up on top of spillway gates. This condition is known to have occurred in water years 1978, 1979, 1980, and 1983. There is no storage below gage height 66 ft because of accumulated sediment. Water released from reservoir flows down river channel 1.5 mi to diversion dam where it is diverted for irrigation near Beardsley. Figures given herein represent usable storage in Lake Pleasant (based on 1979 capacity table). Contents of small reservoir formed by diversion dam is not included.

COOPERATION.--Gage-height record furnished by Maricopa County Municipal Water Conservation District No. 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 178,500 acre-ft Apr. 19, 1941, of which 500 acre-ft was uncontrolled storage; maximum gage height, 170.92 ft Mar. 28, 1979; no storage Sept. 5, 1933, July 19 to Aug. 13, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum storage, 124,000 acre-ft Mar. 16-29; maximum gage height, 160.32 ft Mar. 11; minimum storage, 73,200 acre-ft Sept. 28, 30; minimum gage height, 141.28 ft.

Capacity table (gage height, in feet, and usable storage, in acre-feet)

140	70,350	160	123,300
150	94,450	170	157,200

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
OBSERVATION AT 17:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87500	86500	86200	107000	114000	123000	123000	116000	110000	99900	88800	77400
2	87600	86400	86200	108000	114000	123000	123000	116000	110000	99500	88400	77100
3	87500	86400	86200	108000	114000	123000	122000	116000	109000	99100	88100	76700
4	87700	86400	86200	108000	114000	123000	122000	116000	109000	98700	87700	76400
5	87700	86400	86200	108000	115000	123000	122000	116000	109000	98300	87300	76100
6	87700	86400	86200	108000	115000	123000	122000	116000	108000	97900	86900	75700
7	87600	86300	86200	108000	115000	123000	122000	115000	108000	97500	86400	75400
8	87600	86300	86300	109000	115000	123000	121000	115000	108000	97000	86400	75000
9	87600	86200	86300	110000	116000	123000	121000	115000	108000	96700	86100	74800
10	87500	86200	86300	110000	116000	123000	121000	115000	107000	96200	85700	74600
11	87500	86200	86500	110000	116000	123000	120000	115000	107000	95700	85200	74400
12	87400	86100	86500	111000	117000	123000	120000	114000	107000	95300	84800	74200
13	87400	86100	87100	111000	117000	123000	120000	114000	106000	94900	84300	74000
14	87400	86100	87800	111000	117000	123000	120000	114000	106000	94300	83900	73900
15	87300	86100	88100	111000	118000	123000	119000	114000	106000	94000	83500	73800
16	87200	86000	88300	111000	118000	124000	119000	114000	105000	93700	83100	73700
17	87100	86000	88500	111000	118000	124000	119000	114000	105000	93300	82800	73600
18	87000	86000	88600	112000	119000	124000	118000	113000	105000	93200	82400	73700
19	87000	86000	88700	112000	119000	124000	118000	113000	104000	93200	82000	73600
20	87000	86000	88900	112000	120000	124000	118000	113000	104000	93000	81600	73600
21	86900	85900	89400	112000	120000	124000	118000	113000	104000	92800	81300	73500
22	86800	85900	89700	112000	120000	124000	118000	112000	103000	92500	81000	73500
23	86800	86000	89900	112000	121000	124000	118000	112000	103000	92200	80600	73500
24	86700	86000	90100	112000	121000	124000	117000	112000	103000	91800	80300	73400
25	86700	86000	90200	112000	122000	124000	117000	112000	102000	91400	80000	73400
26	86600	86200	90400	112000	122000	124000	117000	112000	102000	91000	79600	73300
27	86600	86200	91000	113000	122000	124000	117000	111000	101000	90500	79300	73300
28	86600	86200	98000	113000	123000	124000	117000	111000	101000	90100	79000	73200
29	86600	86200	104000	113000	---	124000	117000	111000	101000	89700	78600	73300
30	86500	86200	106000	113000	---	123000	117000	111000	100000	89500	78200	73200
31	86500	---	106000	114000	---	123000	---	110000	---	89100	77800	---
MAX	87700	86500	106000	114000	123000	124000	123000	116000	110000	99900	88800	77400
MIN	86500	85900	86200	107000	114000	123000	117000	110000	100000	89100	77800	73200
(*)	146.88	146.78	154.46	156.87	159.83	159.96	157.87	155.75	152.18	147.95	143.28	141.28
(**)	-1100	-300	+19800	+8000	+9000	0	-6000	-7000	-10000	-10900	-11300	-4600

CAL YR 1984 MAX 129000 MIN 85900 ** -22000
WTR YR 1985 MAX 124000 MIN 73200 ** -14400

* Gage height, in feet, at 1700 hours on last day of month.
** Change in storage, in acre-feet.

09513600 AGUA FRIA RIVER BELOW WADDELL DAM, AZ

WATER-QUALITY RECORDS

LOCATION.--Lat 33°49'55", long 112°16'24", in SE¼ sec.29, T.6 N., R.1 E., Maricopa County, Hydrologic Unit 15070102, 1.5 mi downstream from Lake Pleasant.

DRAINAGE AREA.--1,459 mi^2.

PERIOD OF RECORD.--December 1950 to September 1958, March 1982 to current year.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR 1985												
02...	0950	119	465	8.40	25.0	13.0	5.7	727	10.3	103	K10	33
24...	1230	74	466	8.58	28.0	16.0	4.9	720	10.8	116	K13	20
MAY												
24...	0835	86	472	8.41	27.0	18.5	4.5	722	9.6	109	K18	K10
JUN												
25...	1045	153	483	7.50	28.5	16.0	13	721	10.1	108	K15	22
JUL												
17...	1200	177	480	8.00	32.0	20.0	5.4	719	8.2	96	K27	23
AUG												
28...	0950	160	490	8.08	33.0	19.5	2.8	722	7.7	89	K19	21
SEP												
24...	1115	12	485	7.30	29.5	24.0	1.3	725	--	--	K11	K9

DATE	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
APR 1985												
02...	180	15	42	18	33	1	2.7	198	1.0	164	56	22
24...	180	12	43	18	33	1	2.8	185	12	168	54	22
MAY												
24...	180	25	44	18	33	1	2.8	192	1.0	158	55	23
JUN												
25...	190	30	44	19	34	1	2.8	193	0	157	54	22
JUL												
17...	180	22	42	18	35	1	3.0	--	--	157	56	24
AUG												
28...	180	7	42	18	34	1	3.0	210	0	166	52	24
SEP												
24...	180	14	44	18	34	1	3.0	207	0	167	49	24

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)
APR 1985												
02...	0.4	20	284	290	0.39	0.10	0.10	0.5	0.6	2.7	0.03	<0.01
24...	0.1	20	290	310	0.39	<0.10	<0.10	0.6	--	--	0.03	<0.01
MAY												
24...	0.4	20	280	290	0.38	<0.10	<0.10	0.4	--	--	0.04	0.01
JUN												
25...	0.4	15	288	290	0.39	<0.10	<0.10	0.4	--	--	0.07	0.04
JUL												
17...	0.4	21	280	290	0.38	<0.10	<0.10	0.5	--	--	0.06	0.03
AUG												
28...	0.4	21	285	300	0.39	<0.10	<0.10	0.4	--	--	0.04	0.04
SEP												
24...	0.4	21	295	300	0.4	<0.10	0.12	0.5	--	--	0.05	0.03

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09513600 AGUA FRIA RIVER BELOW WADDELL DAM, AZ--Continued

WATER QUALITY DATA

DATE	PHOSPHORUS, ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS- SOLVED (UG/L AS CR) (01030)
APR 1985												
02...	0.02	0.06	9	8	200	56	110	80	<1	<1	4	10
24...	0.02	0.06	9	8	--	61	100	80	<1	<1	<1	<10
MAY												
24...	<0.01	--	10	10	400	57	140	90	1	<1	2	<10
JUN												
25...	0.03	0.09	13	11	<100	61	110	70	<1	<1	4	<10
JUL												
17...	0.03	0.09	14	13	<100	66	60	50	1	<1	10	<10
AUG												
28...	0.02	0.06	15	14	<100	61	160	90	<1	<1	<1	<10
SEP												
24...	<0.01	--	15	15	<100	52	100	90	<1	<1	6	<10

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGANESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)
APR 1985											
02...	10	3	430	<3	1	2	80	11	0.1	<0.1	<1
24...	4	4	320	<3	4	3	90	5	<0.1	<0.1	<1
MAY											
24...	15	3	220	4	3	<1	80	3	<0.1	<0.1	<1
JUN											
25...	9	5	600	5	5	5	290	130	<0.1	<0.1	<1
JUL											
17...	7	4	440	3	1	1	300	200	<0.1	<0.1	<1
AUG											
28...	6	1	320	5	4	<1	390	280	<0.1	<0.1	<1
SEP											
24...	4	3	130	<3	<1	<1	70	28	<0.1	<0.1	<1

DATE	SELENIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	CYANIDE TOTAL (MG/L AS CN) (00720)	CYANIDE DIS- SOLVED (MG/L AS CN) (00723)	SEDIMENT, SUS- PENDED (MG/L) (80154)	SEDIMENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
APR 1985											
02...	<1	1	<1	<10	<3	4.1	0.4	<0.01	<0.01	9	2.9
24...	<1	<1	<1	20	<3	4.7	0.5	<0.01	<0.01	7	1.4
MAY											
24...	<1	<1	<1	10	<3	4.5	0.4	<0.01	<0.01	6	1.4
JUN											
25...	<1	<1	<1	<10	13	4.0	0.7	<0.01	<0.01	14	5.8
JUL											
17...	<1	<1	<1	30	11	--	0.6	--	--	6	2.9
AUG											
28...	<1	<1	<1	<10	18	4.9	0.4	<0.01	<0.01	5	2.2
SEP											
24...	<1	<1	<1	10	<3	4.9	0.4	<0.01	<0.01	3	0.09

< Actual value is known to be less than value shown.

09513780 NEW RIVER NEAR ROCK SPRINGS, AZ

LOCATION.--Lat 33°58'27", long 112°05'54", in SW¼SW¼ sec.6, T.7 N., R.3 E., Maricopa County, Hydrologic Unit 15070102, on right bank 180 ft upstream from road crossing and 6 mi southeast of Rock Springs.

DRAINAGE AREA.--67.3 mi^2.

PERIOD OF RECORD.--Water years 1962-65 (annual maximums only), October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,310 ft above National Geodetic Vertical Datum of 1929, from topographic map. Jan. 2, 1964, to Sept. 30, 1965, crest-stage gage, and Oct. 28, 1965, to Nov. 16, 1967, water-stage recorder, at same site at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, Dec. 20 to Jan. 3 and Sept. 4-6, which are poor .

AVERAGE DISCHARGE.--20 years, 14.9 ft^3/s, 10,800 acre-ft/yr; median of yearly mean discharges, 7.2 ft^3/s, 5,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft^3/s Sept. 5, 1970, gage height, 13.5 ft, from profile past gage, from rating curve extended above 380 ft^3/s on basis of slope-area measurements at gage heights 3.6, 4.73, 7.3, 10.7, and 13.5 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	2030	343	3.52	Dec. 27	unknown	*2,310	*5.61
Dec. 13	0745	634	4.01	Jan. 8	1330	829	4.31
Dec. 20	0900	718	4.14				

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	2.2	20	11	5.8	3.2	2.1	.00	.00	.00	.00
2	.00	.00	2.1	15	9.6	5.5	3.1	1.8	.00	.00	.00	.00
3	35	.00	2.0	15	13	5.4	3.0	1.5	.00	.00	.00	.00
4	25	.00	1.9	15	16	5.1	2.9	1.2	.00	.00	.00	.00
5	3.8	.00	1.9	13	21	4.8	2.7	1.1	.00	.00	.00	.00
6	1.8	.00	1.9	11	22	4.4	2.6	.94	.00	.00	.00	.00
7	1.0	.00	1.9	9.2	26	4.1	2.6	.87	.00	.00	.00	.00
8	.38	.00	2.2	277	36	3.8	2.6	.82	.00	.00	.00	.00
9	.17	.00	2.8	88	88	3.6	2.5	.78	.00	.00	.00	.00
10	.10	.00	3.0	40	102	3.5	2.4	.72	.00	.00	.00	.00
11	.07	.00	33	27	69	3.6	2.2	.70	.00	.00	.00	.00
12	.11	.00	47	22	37	4.2	2.1	.66	.00	.00	.00	.00
13	.07	.00	268	19	28	3.8	2.0	.62	.00	.00	.00	.00
14	.03	.00	79	17	23	3.4	1.8	.58	.00	.00	.00	.00
15	.01	.00	32	14	20	3.9	1.7	.47	.00	.00	.00	.00
16	.00	.00	20	13	18	4.6	1.5	.36	.00	.00	.00	.00
17	.00	.00	16	11	16	5.0	1.4	.32	.00	.00	.00	.00
18	.00	.00	14	9.4	14	4.0	1.3	.33	.00	9.4	.00	.58
19	.00	.00	11	8.4	12	3.7	1.4	.25	.00	4.3	.00	.01
20	.00	.00	175	8.6	11	4.0	1.5	.20	.00	.83	.00	.00
21	.00	.00	25	8.7	11	3.7	2.0	.16	.00	.18	.00	.00
22	.00	.00	16	8.2	9.9	3.5	2.3	.12	.00	02	.00	.00
23	.00	.00	15	8.3	8.8	3.4	2.4	.10	.00	.00	.00	.00
24	.00	.00	14	7.9	8.0	3.3	2.0	.10	.00	.00	.00	.00
25	.00	4.9	13	7.4	7.5	3.2	1.7	.10	.00	.00	.00	.00
26	.00	11	11	8.1	6.9	3.1	1.6	.04	.00	.00	.00	.00
27	.00	4.8	520	18	6.5	3.1	1.7	.00	.00	.00	.00	.00
28	.00	3.3	120	22	6.1	3.0	2.7	.00	.00	.00	.00	.00
29	.00	2.7	50	15	---	3.3	2.8	.00	.00	.00	.00	.00
30	.00	2.4	30	14	---	3.6	2.6	.00	.00	.00	.00	.00
31	.00	---	25	13	---	3.4	---	.00	---	.00	.00	---
TOTAL	67.54	29.10	1555.9	783.2	659.3	122.8	66.3	16.94	.00	14.73	.00	.59
MEAN	2.18	.97	50.2	25.3	23.5	3.96	2.21	.55	.000	.48	.000	.020
MAX	35	11	520	277	102	5.8	3.2	2.1	.00	9.4	.00	.58
MIN	.00	.00	1.9	7.4	6.1	3.0	1.3	.00	.00	.00	.00	.00
AC-FT	134	58	3090	1550	1310	244	132	34	.00	29	.00	1.2

CAL YR 1984 TOTAL 2143.30 MEAN 5.85 MAX 520 MIN .00 AC-FT 4250
WTR YR 1985 TOTAL 3316.40 MEAN 9.09 MAX 520 MIN .00 AC-FT 6580

09513860 SKUNK CREEK NEAR PHOENIX, AZ

LOCATION (Revised).--Lat 33°43'50", long 112°07'09", in SE¼ sec.35, T.5 N., R.2 E., Maricopa County, Hydrologic Unit 15070102, on right bank dike of Skunk Creek flood control channel, 300 ft east of frontage road of Interstate Highway 17, 3 mi north of Adobe and 20 mi north of City Hall in Phoenix. Prior to Dec. 29, 1984, at site 300 ft downstream.

DRAINAGE AREA.--64.6 mi^2.

PERIOD OF RECORD.--Water years 1960-67 (annual maximums only), October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,472.61 ft above National Geodetic Vertical Datum of 1929. May 1961 to Sept. 30, 1967, crest-stage gage at site 400 ft downstream at datum 6.67 ft lower, and Oct. 1, 1967 to Dec. 29, 1984, at site 300 ft downstream at datum 12.66 ft lower.

REMARKS.--Estimated daily discharges: Oct. 1-23, Nov. 23-29, Dec. 13-18, May 15-17, and Aug. 9-30. Records poor.

AVERAGE DISCHARGE.--18 years, 1.67 ft^3/s, 1,210 acre-ft/yr; median of yearly mean discharges, 0.68 ft^3/s, 490 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft^3/s Aug. 1, 1964, gage height, 10.48 ft, present datum, from rating curve extended above 6,200 ft^3/s; maximum gage height, 12.24 ft Sept. 5, 1970; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	unknown	565	*3.41	Jan. 26	1930	*1,320	2.79
Dec. 27	unknown	258	3.20	Sept. 18	1730	332	2.01
Dec. 28	1600	200	3.15				

No flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	56
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	11
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	78	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	16	18	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	9.0	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	50.00	.00	25.00	96.00	.00	.00	.00	.00	.00	.00	.00	67.00
MEAN	1.61	.000	.81	3.10	.000	.000	.000	.000	.000	.000	.000	2.23
MAX	50	.00	16	78	.00	.00	.00	.00	.00	.00	.00	56
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	99	.00	50	190	.00	.00	.00	.00	.00	.00	.00	133

CAL YR 1984 TOTAL 226.50 MEAN .62 MAX 92 MIN .00 AC-FT 449
WTR YR 1985 TOTAL 238.00 MEAN .65 MAX 78 MIN .00 AC-FT 472

09516500 HASSAYAMPA RIVER NEAR MORRISTOWN, AZ

LOCATION.--Lat 33°53'06", long 112°39'41", in SW¼SE¼ sec.3, T.6 N., R.4 W., Maricopa County, Hydrologic Unit 15070103, on left bank 600 ft downstream from mouth of San Domingo Wash, 3.0 mi northwest of Morristown and 7 mi southeast of Wickenburg.

DRAINAGE AREA.--774 mi^2.

PERIOD OF RECORD.--October 1938 to June 1947 (continuous-record station), 1954, 1956, 1964-81 (partial-record station). October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,831.16 ft above National Geodetic Vertical Datum of 1929. 1954, 1956, and 1964-81 crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 29 to Jan. 11. Records poor. Only daily discharges above 500 ft^3/s are published.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft^3/s Sept. 5, 1970, gage height, 19.0 ft, from high-water profile past gage and on basis of slope-area measurement of peak flow; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 848 ft^3/s Dec. 28, gage height, 9.20 ft. No daily discharges above 500 ft^3/s for entire year.

GILA RIVER BASIN

09517000 HASSAYAMPA RIVER NEAR ARLINGTON, AZ

LOCATION.--Lat 33°20'50", long 112°43'30", in NW¼ sec.13, T.1 S., R.5 W., Maricopa County, Hydrologic Unit 15070104, at former U.S. Highway 80, 1.8 mi upstream from mouth and 2.8 mi northeast of Arlington.

DRAINAGE AREA.--1,470 mi^2, approximately.

PERIOD OF RECORD.--Water years 1961-77 (annual maximums only), October 1977 to current year (discharge above 500 ft^3/s only).

GAGE.--Water-stage recorder. Datum of gage is 822.68 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 2, 1984 at datum 9.23 ft higher.

REMARKS.--Estimated daily discharges: Oct. 8-16, Oct. 24 to Nov. 15, Sept. 1-11. Records poor. Only daily discharges above 500 ft^3/s are published. Records do not include irrigation return flow past station except where it cannot be separated from natural flow. Small diversions above station for irrigation and livestock.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,000 ft^3/s Sept. 5, 1970, gage height, 8.40 ft, result of slope-area measurement of peak flow; no natural flow for most of time each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 372 ft^3/s Dec. 28, gage height, 4.18 ft; no natural flow for most of year. No daily discharges above 500 ft^3/s for entire year.

GILA RIVER BASIN

09517490 CENTENNIAL WASH AT SOUTHERN PACIFIC RAILROAD BRIDGE, NEAR ARLINGTON, AZ

LOCATION.--Lat 33°18'37", long 112°52'52", in SW¼NW¼SW¼ sec.28, T.1 S., R.6 W., Maricopa County, Hydrologic Unit 15070104, on downstream side of bridge, 9.0 mi upstream from Gillespie Dam and 7.2 mi southwest of Arlington.

DRAINAGE AREA.--1,800 mi^2, approximately.

PERIOD OF RECORD.--May 15, 1980 to September 1985 (discontinued). Daily discharge greater than 300 ft^3/s only published October 1984 to September 1985.

GAGE.--Water-stage recorder. Datum of gage is 841.06 ft above National Geodetic Vertical Datum of 1929 (Maricopa County flood control bench mark).

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 15, were well below the 300 ft^3/s limit. There was no daily discharge this year at or above 300 ft^3/s. Flow regulated by several small retention dams in upper end of basin. Small diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft^3/s Sept. 2, 1984, gage height, 11.34 ft, from rating curve extended above 200 ft^3/s on basis of step-back water analysis; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--No natural flow gaged for the year.

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, AZ
(National stream-quality accounting network)

LOCATION.--Lat 33°13'45", long 112°46'00", in SE¼NE¼ sec.28, T.2 S., R.5 W., Maricopa County, Hydrologic Unit 15070101, at Gillespie Dam, 8 mi downstream from Hassayampa River. Gila Bend Canal diverts from left end, and Enterprise Canal diverts from right end of Gillespie Dam.

DRAINAGE AREA.--49,650 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1935 to November 1939 (monthly discharge only published in WSP 1313), December 1939 to September 1971 (published with records for sta 09519500, Gila River below Gillespie Dam), 1972 and 1973 (water year estimates only, listed in REMARKS for sta 09519500), October 1973 to current year. Low-flow records prior to October 1970 are not equivalent as leakage less than 5 ft^3/s is not included.

09518500. Gila Bend Canal: May 1935 to September 1971, October 1973 to current year (since October 1941, monthly discharge only).

09519000. Enterprise Canal: June 1935 to September 1939 (discharge measurements and monthly estimates only), October 1939 to September 1971, April 1974 to current year (since October 1941, monthly discharge only). Published as "Gillespie Canal" prior 1951.

GAGE.--Gila Bend Canal: Water-stage recorder 200 ft downstream from headgates.
Enterprise Canal: Water-stage recorder 600 ft downstream from intake at dam.

REMARKS.--Records good except those below 1,000 ft^3/s, which are fair. Record is obtained by combining, on a daily basis, the flows of Gila Bend Canal, Enterprise Canal, and Gila River below Gillespie Dam (see sta 09519500).

Many large diversions above station for irrigation, municipal, and industrial use. Flow of Gila River and tributaries above this station is regulated by San Carlos Reservoir on Gila River - capacity, 1,073,600 acre-ft; by a series of reservoirs on Salt River - capacity, 1,755,000 acre-ft; by Bartlett and Horseshoe Reservoirs on Verde River - capacity, 317,700 acre-ft; and by Lake Pleasant on Agua Fria River - capacity, 157,600 acre-ft.

AVERAGE DISCHARGE.--50 years, 410 ft^3/s, 297,000 acre-ft/yr; median of yearly mean discharges, 90 ft^3/s, 65,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 124,000 ft^3/s Feb. 17, 1980; no flow except for possible leakage of less than 5 ft^3/s Nov. 24-27, 1966, July 14, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 27,300 ft^3/s Dec. 29; minimum daily, 8.6 ft^3/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	188	261	23300	8520	5400	2490	759	230	139	145	143
2	182	179	261	17500	4650	7150	2450	1040	249	133	155	178
3	175	177	204	13100	3810	14700	3080	1610	271	114	134	164
4	168	183	302	3370	4200	10100	3360	1360	256	104	133	152
5	175	238	324	2800	4100	6700	2180	1230	234	131	161	150
6	185	265	316	2710	4160	3980	1750	1450	206	110	153	146
7	192	267	475	2440	3360	2950	1560	1140	181	130	146	165
8	199	236	512	1880	2360	2820	1350	1400	156	153	141	180
9	190	248	516	1710	2350	2310	1260	995	152	103	154	199
10	168	267	544	1820	2350	1670	1980	910	140	109	152	194
11	163	241	638	1880	2350	1440	2290	782	145	105	175	165
12	178	277	654	1950	2260	1460	1780	379	145	116	200	144
13	167	266	607	2370	2560	1490	1370	331	156	114	176	134
14	170	242	599	2210	2050	8870	1300	293	159	99	158	136
15	174	243	602	1930	2220	11900	1280	307	159	99	129	137
16	175	244	625	1770	2220	15200	1340	303	147	113	122	128
17	167	264	645	1760	1690	15300	1200	285	157	139	134	112
18	164	267	650	1720	1220	16700	890	301	158	168	132	128
19	165	280	704	1700	1060	20800	770	273	156	220	135	117
20	156	268	759	1690	1450	13100	533	257	150	255	138	113
21	152	274	656	1690	1540	7340	426	261	110	268	141	107
22	159	296	504	1680	1640	7080	363	261	131	265	159	88
23	152	304	401	1660	1460	4740	397	280	157	243	168	78
24	143	304	1270	1640	1020	3620	413	271	162	226	150	63
25	143	341	2580	1560	969	3530	456	249	157	191	132	52
26	156	345	2660	1610	2400	3470	1430	231	146	152	149	45
27	146	341	2890	1680	4770	2610	1230	218	163	150	149	25
28	169	318	12200	1110	5010	2710	884	225	139	162	139	13
29	173	266	27300	4280	---	2570	796	222	120	168	155	11
30	178	261	23400	10800	---	2520	638	222	123	163	137	8.6
31	183	---	24100	9720	---	2500	---	226	---	138	115	---
TOTAL	5246	7890	108159	127040	77749	206730	41246	18071	5015	4780	4567	3475.6
MEAN	169	263	3489	4098	2777	6669	1375	583	167	154	147	116
MAX	199	345	27300	23300	8520	20800	3360	1610	271	268	200	199
MIN	143	177	204	1110	969	1440	363	218	110	99	115	8.6
AC-FT	10410	15650	214500	252000	154200	410000	81810	35840	9950	9480	9060	6890
(*)	0	0	0	0	2880	13590	14810	14290	9300	8900	8500	6370
(**)	922	204	828	924	809	1060	920	831	586	533	550	502

CAL YR 1984 TOTAL 214706.0 MEAN 587 MAX 27300 MIN 20 AC-FT 425900 * 74040 ** 8690
WTR YR 1985 TOTAL 609968.6 MEAN 1671 MAX 27300 MIN 8.6 AC-FT 1210000 * 78640 ** 8670

* Diversions, in acre-feet, to Gila Bend Canal (sta 09518500). See remarks above. For records prior to 1972, see sta C9519500.

** Diversions, in acre-feet, to Enterprise Canal (sta 09519000). For records prior to 1972, see sta 09519500.

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to September 1971, March 1974 to current year. Prior to October 1967, published as 09519500, Gila River below Gillespie Dam, Ariz.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1971, April 1974 to September 1981.
WATER TEMPERATURES: December 1950 to September 1971, April 1974 to September 1981.

REMARKS.--Unpublished daily specific conductance measurements for period December 1950 to September 1964 available from district office in Tucson, Ariz.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1984											
24...	1415	151	3350	8.10	24.0	19.5	58	738	8.8	100	30
NOV											
28...	1130	315	3000	7.75	11.0	11.0	54	746	11.0	103	63
DEC											
19...	1050	761	2500	7.60	11.5	13.0	68	743	10.3	101	44
JAN 1985											
30...	1140	11200	938	8.20	13.0	12.0	90	742	10.4	99	36
FEB											
26...	1430	2490	1370	7.30	26.5	20.0	86	741	8.8	100	25
APR											
03...	1055	3380	1400	8.10	29.5	20.0	96	739	6.6	76	45
25...	0930	321	3060	8.20	26.5	20.5	15	731	6.3	74	71
MAY											
30...	0900	220	3600	8.60	27.0	22.0	13	739	6.1	73	<10
JUN											
27...	0850	161	3540	8.30	32.0	24.0	26	743	6.6	82	39
JUL											
18...	1300	162	3700	8.50	27.0	27.0	18	740	13.8	181	51
AUG											
29...	0925	158	4040	8.30	33.5	28.0	25	738	4.8	--	60
SEP											
27...	1100	38	3100	8.20	30.0	23.5	31	738	7.4	91	<10

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)
OCT 1984											
24...	--	740	620	310	140	65	470	8	9.1	--	--
NOV											
28...	940	1100	540	210	120	58	400	8	10	--	--
DEC											
19...	200	1000	460	250	110	46	340	7	8.6	--	--
JAN 1985											
30...	350	550	180	60	49	15	120	4	3.8	151	0
FEB											
26...	170	140	270	110	67	26	>5.0	--	5.5	--	--
APR											
03...	560	660	260	94	67	23	190	5	5.6	206	0
25...	K41	180	700	470	160	73	>5.0	--	8.9	278	0
MAY											
30...	52	130	640	400	150	65	500	9	6.2	264	17
JUN											
27...	670	350	690	460	160	71	490	8	10	268	7.0
JUL											
18...	--	430	700	480	170	57	500	8	9.5	--	--
AUG											
29...	320	84	780	530	190	75	660	11	9.6	312	0
SEP											
27...	250	200	550	320	130	54	440	8	9.9	--	--

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.
> Actual value is known to be greater than value shown.

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, AZ--Continued

WATER QUALITY DATA

DATE	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
OCT 1984											
24...	309	400	680	1.8	--	1990	--	--	146	9.40	--
NOV											
28...	332	380	590	1.3	28	1780	1800	2.4	46	7.90	15.0
DEC											
19...	217	300	490	1.5	--	1460	--	--	98	7.30	--
JAN 1985											
30...	125	67	170	0.4	18	522	520	0.71	530	0.80	0.78
FEB											
26...	162	140	250	0.7	--	808	--	--	252	2.80	--
APR											
03...	169	150	260	0.9	22	811	820	1.1	474	2.70	2.70
25...	223	350	660	1.0	--	1870	--	--	58	7.00	--
MAY											
30...	244	430	780	1.4	20	2150	2100	2.9	31	5.90	6.00
JUN											
27...	235	460	800	1.5	--	2180	--	--	59	8.00	--
JUL											
18...	228	490	780	1.5	22	2280	2200	3.1	50	8.10	8.20
AUG											
29...	256		--	--	--	2540	--	--	39	9.80	--
SEP											
27...	227	370	650	1.7	23	1860	1800	2.5	52	6.80	7.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT 1984											
24...	5.40	--	1.6	7.0	16	73	3.50	--	--	--	--
NOV											
28...	7.70	7.60	3.3	11	19	84	5.00	4.70	3.40	10	10
DEC											
19...	6.00	--	0.5	6.5	14	61	3.50	--	--	--	--
JAN 1985											
30...	0.51	0.54	--	--	--	--	--	0.27	0.26	0.8	--
FEB											
26...	1.70	--	1.8	3.5	6.3	28	1.20	--	--	--	--
APR											
03...	0.41	0.43	0.39	0.8	3.5	15	1.50	0.73	0.69	2.1	10
25...	0.57	--	1.8	2.4	9.4	42	1.90	--	--	--	--
MAY											
30...	0.09	0.80	1.8	1.9	7.8	35	1.70	1.00	1.00	3.1	--
JUN											
27...	0.64	--	2.5	3.1	11	49	2.00	--	--	--	--
JUL											
18...	0.10	0.07	1.9	2.0	10	45	1.30	1.10	1.10	3.4	<10
AUG											
29...	0.17	--	1.9	2.1	12	53	1.70	--	--	--	--
SEP											
27...	3.80	3.70	1.7	5.5	12	54	2.80	2.50	2.20	6.7	10

< Actual value is known to be less than value shown.

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, AZ--Continued

WATER QUALITY DATA

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1984 24...	10	7	<100	--	1300	<1	--	7	<1	--	25
NOV 28...	9	8	<100	<10	1200	<1	1	23	9	1	26
DEC 19...	9	8	<100	--	950	<1	<1	24	4	--	21
JAN 1985 30...	8	4	39	--	140	<1	<1	--	3	--	70
FEB 26...	8	7	59	--	390	<1	<1	15	<1	--	37
APR 03...	7	6	62	<0.5	340	<1	<1	28	<1	<3	60
25...	9	9	500	--	1000	1	1	3	<1	--	11
MAY 30...	10	9	300	--	1400	<1	3	5	<1	--	10
JUN 27...	9	10	<100	--	1400	<1	<1	6	<1	--	9
JUL 18...	11	12	200	<10	<970	1	<1	15	<1	<1	13
AUG 29...	11	10	100	--	1900	<1	<1	<1	2	--	10
SEP 27...	10	9	<100	<10	1200	1	1	10	<1	<1	13

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)
OCT 1984 24...	--	4700	10	7	--	--	200	--	<0.1	--	--
NOV 28...	5	--	40	33	4	140	260	70	0.1	<0.1	3
DEC 19...	6	3500	50	4	1	--	200	90	0.1	--	--
JAN 1985 30...	5	21000	4	68	<1	--	640	30	<0.1	--	--
FEB 26...	6	7300	8	10	<1	--	300	9	<0.1	--	--
APR 03...	7	--	5	17	<1	96	510	5	0.2	<0.1	<10
25...	6	950	40	2	6	--	140	90	0.2	--	--
MAY 30...	7	970	20	5	<1	--	110	20	<0.1	--	--
JUN 27...	6	930	150	3	<1	--	80	10	<0.1	--	--
JUL 18...	6	--	30	1	<1	200	100	10	0.1	0.2	9
AUG 29...	3	1400	30	3	<1	--	110	20	<0.1	--	--
SEP 27...	4	--	20	3	2	170	130	40	<0.1	<0.1	6

< Actual value is known to be less than value shown.

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, AZ--Continued

WATER QUALITY DATA

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1984											
24...	--	4	--	--	--	--	40	10	92	165	67
NOV											
28...	4	3	3	<1	1900	29	60	20	24	555	472
DEC											
19...	--	3	3	<1	--	--	40	10	94	107	220
JAN 1985											
30...	--	<1	<1	<1	--	--	80	<3	63	1150	34800
FEB											
26...	--	<1	<1	<1	--	--	50	13	73	302	2030
APR											
03...	6	<1	3	<1	710	9	80	3	86	960	8760
25...	--	3	3	<1	--	--	<10	10	87	39	34
MAY											
30...	--	2	4	<1	--	--	10	10	--	--	--
JUN											
27...	--	3	4	<1	--	--	30	20	90	49	21
JUL											
18...	5	5	5	<1	2500	35	30	60	93	45	20
AUG											
29...	--	8	7	<1	--	--	10	20	88	54	23
SEP											
27...	10	4	4	<1	1900	23	40	20	65	93	9.5

< Actual value is known to be less than value shown.

09519500 GILA RIVER BELOW GILLESPIE DAM, AZ

LOCATION.--Lat 33°13'45", long 112°46'00", in SE¼NE¼ sec.28, T.2 S., R.5 W., Maricopa County, Hydrologic Unit 15070101, at left end of Gillespie Dam, 8 mi downstream from Hassayampa River.

DRAINAGE AREA.--49,650 mi^2.

PERIOD OF RECORD.--August 1921 to current year. Low-flow records prior to October 1970 are not equivalent as leakage of less than 5 ft^3/s not included, and from October 1971 to September 1973, when no leakage was included. Annual estimate of leakage was listed in REMARKS for the 1972 water year. Prior to 1939, published as "at Gillespie Dam."

REVISED RECORDS.--WSP 1213: 1939. WSP 1243: 1924(M). WSP 1926: Drainage area.

GAGE.--Water-stage recorder since July 28, 1924. Datum of gage is 9.95 ft below average elevation of crest of dam, which is 753.46 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 11, 1924, depth of water read on crest at left end of dam. Nov. 11, 1924, to July 22, 1932, datum of gage was at average elevation of dam crest. July 23, 1932, to Apr. 27, 1955, datum of gage was 5.00 ft below average elevation of crest of dam. Since Apr. 2, 1974, supplementary water-stage recorder and concrete control 70 ft downstream from crest of dam at datum 5.64 ft lower than datum of base gage.

REMARKS.--No estimated daily discharges. Records fair. Flow consists of water passing over the dam, and through the dam, but does not include water diverted to Gila Bend or Enterprise Canals. See sta 09518000, Gila River above diversions, at Gillespie Dam, for records of flow reaching dam, and of diversions to Gila Bend and Enterprise Canals. For diversions and regulation above station, see REMARKS for sta 09518000.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 178,000 ft^3/s Feb. 16, 1980, gage height, 18.81 ft, present datum; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1891, 250,000 ft^3/s, estimated, in February 1891.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 27,300 ft^3/s Dec. 29; minimum daily, 0.20 ft^3/s July 23 to Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	173	260	23300	8510	5190	2230	494	.33	.20	.20	.30
2	167	164	260	17500	4640	6930	2180	761	3.7	.20	.20	.30
3	160	162	200	13100	3800	14500	2810	1320	14	.40	.20	.30
4	153	168	287	3350	4180	9930	3090	1070	1.6	.60	.20	.30
5	160	223	310	2780	4090	6480	1920	923	.24	.80	.20	.30
6	170	258	306	2690	4150	3750	1490	1150	.19	1.0	.20	.30
7	177	267	460	2420	3350	2700	1300	832	.09	1.4	.20	.30
8	184	235	497	1870	2350	2560	1100	1100	.09	1.7	.20	.30
9	175	248	501	1690	2340	2050	998	697	.09	1.7	.20	.30
10	153	266	529	1810	2340	1410	1720	632	.09	1.9	.20	.30
11	148	240	623	1870	2340	1180	2030	581	.09	1.7	.20	.30
12	163	276	638	1940	2220	1200	1510	192	.11	1.7	.20	.30
13	152	266	591	2350	2490	1230	1100	151	.11	1.4	.20	.30
14	155	241	583	2200	1990	8620	1040	101	.11	1.5	.20	.30
15	159	242	587	1910	2160	11700	1020	81	.13	1.7	.20	.30
16	160	244	609	1760	2160	15000	1080	76	.13	1.6	.20	.30
17	152	263	630	1750	1630	15200	930	69	.19	1.4	.20	.30
18	149	266	634	1700	1150	16600	625	105	.24	1.2	.20	.30
19	150	279	688	1680	979	20600	505	78	.27	1.0	.20	.30
20	141	267	744	1670	1360	12900	268	42	.35	.80	.20	.30
21	137	273	641	1680	1450	7110	162	1.2	.64	.60	.20	.30
22	144	295	502	1670	1540	6820	99	1.0	.88	.40	.20	.30
23	137	303	394	1640	1350	4490	133	4.1	1.3	.20	.20	.30
24	128	303	1260	1620	878	3370	149	.35	1.2	.20	.20	.30
25	128	340	2570	1540	832	3280	191	.29	1.1	.20	.20	.30
26	141	344	2650	1590	2240	3230	1160	.37	1.0	.20	.20	.30
27	131	340	2870	1670	4570	2360	960	.42	.90	.20	.20	.30
28	154	317	12100	1100	4810	2460	618	.42	.80	.20	.20	.30
29	158	265	27300	4270	---	2310	531	.29	.60	.20	.20	.30
30	163	260	23400	10700	---	2260	373	.20	.40	.20	.20	.30
31	168	---	24100	9700	---	2240	---	.28	---	.20	.20	---
TOTAL	4781	7788	107724	126520	75899	199660	33322	10463.92	30.97	26.70	6.20	9.00
MEAN	154	260	3475	4081	2711	6441	1111	338	1.03	.86	.20	.30
MAX	184	344	27300	23300	8510	20600	3090	1320	14	1.9	.20	.30
MIN	128	162	200	1100	832	1180	99	.20	.09	.20	.20	.30
AC-FT	9480	15450	213700	251000	150500	396000	66090	20760	61	53	12	18

CAL YR 1984 TOTAL 172950.43 MEAN 473 MAX 27300 MIN .02 AC-FT 343000
WTR YR 1985 TOTAL 566230.79 MEAN 1551 MAX 27300 MIN .09 AC-FT 1123000

09519800 GILA RIVER BELOW PAINTED ROCK DAM, AZ

LOCATION.--Lat 33°04'30", long 113°00'50", in SE¼ sec.18, T.4 S., R.7 W., Maricopa County, Hydrologic Unit 15070201, on left bank 0.3 mi downstream from Painted Rock Dam and 19 mi northeast of Sentinel.

DRAINAGE AREA.--50,910 mi^2, approximately.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 518.69 ft above National Geodetic Vertical Datum of 1929 (levels by Army Corps of Engineers). Auxiliary gage May 5, 1969, to Mar. 30, 1973, at site 0.3 mi upstream, at datum 2.87 ft higher; Feb. 8, 1979 to current year, at site 0.3 mi upstream, at same datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 5, Dec. 19-28, May 28-30, Aug. 4-6, 12, 15, Aug. 27 to Sept. 13, and Sept. 30. Records fair except those for periods of estimated daily discharges which are poor. Many diversions above station for irrigation. Flow above station regulated by many reservoirs, the largest of which is Painted Rock Reservoir - capacity, 2,492,000 acre-ft. (See REMARKS for sta 09518000, Gila River above diversions, at Gillespie Dam.)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,190 ft^3/s, result of a discharge measurement May 3, 1983, gage height, 9.36 ft, maximum gage height, 10.57 ft Feb. 9, 1979; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,240 ft^3/s, May 7; minimum daily, 1.0 ft^3/s Sept. 23-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	10	110	1650	3320	3900	3490	3980	28	22	19	8.0
2	13	10	107	1720	3220	3930	3510	4020	26	20	22	8.0
3	12	10	107	1700	3230	3820	3520	4090	26	20	24	7.0
4	11	10	107	1570	3260	3890	3520	4140	25	21	18	7.0
5	10	10	104	1610	3380	3750	3550	4080	36	21	20	6.0
6	10	13	57	1610	3320	3800	3550	4050	35	18	20	6.0
7	10	15	98	1840	3320	3760	3550	4240	35	18	18	6.0
8	10	19	110	2040	3350	3780	3490	4090	33	19	20	5.0
9	10	22	71	2060	3380	3800	3560	3920	30	18	18	5.0
10	10	23	90	2260	3380	3800	3560	3100	26	24	18	4.0
11	10	26	104	2400	3380	3800	3590	2080	19	25	17	4.0
12	10	30	117	2410	3400	3780	3620	2030	16	25	16	4.0
13	10	30	127	2360	3570	3690	3610	1940	17	21	16	4.0
14	10	30	131	2670	3800	3720	3590	1870	16	18	16	4.0
15	10	32	138	2910	3740	3750	3540	1750	21	20	15	4.0
16	10	35	138	2890	3790	3670	3550	1620	23	19	15	3.0
17	10	41	138	2870	3800	3750	3600	1180	17	21	16	3.0
18	10	41	146	2860	3830	3750	3610	445	17	20	16	3.0
19	10	46	50	2860	3850	3610	3600	80	20	25	15	3.0
20	10	52	10	2890	3830	3480	3640	65	19	28	17	2.0
21	10	55	10	2870	3720	3540	3600	59	16	21	18	2.0
22	10	55	10	2920	3800	3520	3600	52	15	23	14	2.0
23	10	71	10	2900	3800	3500	3650	49	19	24	16	1.0
24	10	73	10	3180	3740	3490	3660	49	18	32	19	1.0
25	10	75	10	3190	3790	3460	3740	46	17	34	20	1.0
26	10	75	10	3280	3800	3490	3810	40	16	30	14	1.0
27	10	80	10	3270	3830	3520	3830	41	14	28	12	1.0
28	10	93	690	3330	3830	3490	3790	20	14	28	10	1.0
29	10	110	1190	3360	---	3540	3830	10	15	26	10	2.0
30	10	114	1400	3350	---	3520	3930	100	16	19	8.0	2.0
31	10	---	1590	3230	---	3510	---	33	---	22	8.0	---
TOTAL	318	1306	7000	80060	100460	113810	108690	53269	645	710	505.0	110.0
MEAN	10.3	43.5	226	2583	3588	3671	3623	1718	21.5	22.9	16.3	3.67
MAX	13	114	1590	3360	3850	3930	3930	4240	36	34	24	8.0
MIN	10	10	10	1570	3220	3460	3490	10	14	18	8.0	1.0
AC-FT	631	2590	13880	158800	199300	225700	215600	105700	1280	1410	1000	218
(*)	0	980	123300	196700	167100	277700	86000	0	0	0	0	0

CAL YR 1984 TOTAL 133622.5 MEAN 365 MAX 3760 MIN .00 AC-FT 265000
WTR YR 1985 TOTAL 466883.0 MEAN 1279 MAX 4240 MIN 1.0 AC-FT 926100

* Contents, in acre-feet at end of month, in Painted Rock Reservoir. Figures furnished by Corps of Engineers and rounded in accordance with Geological Survey standard practice.

09520360 GILA RIVER NEAR MOHAWK, AZ

LOCATION.--Lat 32°47'18", long 113°45'48", on section line between sec.25 and 26, T.7 S., R.15 W., Yuma County, Hydrologic Unit 15070201, in center of channel at culvert outlet at Avenue 51E, and 4.0 mi north of Mohawk.

DRAINAGE AREA.--55,430 mi^2, approximately.

PERIOD OF RECORD.--February to April 1966 (published in WSP 1850-C), April 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 295 ft, from topographic map. Prior to March 1983 at site 70 ft upstream at datum 6.45 ft higher.

REMARKS.--Estimated daily discharges: July 1-15, Aug. 15 to Sept. 30. Records good. Flow regulated by Painted Rock Dam; capacity of reservoir at Painted Rock Dam is 2,492,000 acre-ft, (see REMARKS for sta 09519800).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,270 ft^3/s Apr. 30, 1980, gage height, 11.28 ft, site and datum then in use; maximum gage height, 14.20 ft June 7, 8, 1983, present site and datum; no flow most of time most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,500 ft^3/s May 10, gage height, 13.84 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	2760	3300	3310	3430	180	15	.92	.00
2	.00	.00	.00	.00	2760	3300	3330	3400	165	14	1.0	.00
3	.00	.00	.00	19	2850	3290	3330	3400	154	14	.70	.00
4	.00	.00	.00	184	2850	3310	3310	3410	141	13	.41	.00
5	.00	.00	.00	361	2830	3300	3300	3420	130	12	.14	.00
6	.00	.00	.00	480	2820	3310	3310	3440	116	12	.00	.00
7	.00	.00	.00	565	2820	3320	3310	3460	112	11	.00	.00
8	.00	.00	.00	629	2830	3310	3330	3460	107	11	.00	.00
9	.00	.00	.00	682	2840	3290	3350	3440	102	10	.00	.00
10	.00	.00	.00	791	2840	3300	3350	3470	95	10	.00	.00
11	.00	.00	.00	899	2850	3300	3350	3460	91	9.0	.00	.00
12	.00	.00	1.7	1010	2860	3300	3340	3360	84	8.0	.00	.00
13	.00	.00	.00	1170	2870	3300	3340	2780	80	8.0	.00	.00
14	.00	.00	.00	1290	2870	3300	3360	2220	76	7.0	.00	.00
15	.00	.00	.00	1390	2890	3310	3360	1990	72	7.0	.00	.00
16	.00	.00	.00	1460	2980	3320	3350	1820	68	6.3	.00	.00
17	.00	.00	.00	1600	3110	3340	3340	1670	65	5.3	.00	.00
18	.00	.00	.00	1750	3160	3340	3300	1520	59	5.0	.00	.00
19	.00	.00	.00	1860	3190	3320	3300	1310	56	4.7	.00	.00
20	.00	.00	.00	1950	3220	3310	3340	1010	51	4.4	.00	.00
21	.00	.00	.00	2040	3230	3320	3340	749	48	4.0	.00	.00
22	.00	.00	.00	2120	3220	3350	3340	599	44	3.8	.00	.00
23	.00	.00	.00	2170	3230	3320	3350	500	43	3.6	.00	.00
24	.00	.00	.00	2240	3240	3310	3350	428	42	3.1	.00	.00
25	.00	.00	.00	2290	3250	3320	3340	375	42	2.9	.00	.00
26	.00	.00	.00	2400	3280	3310	3350	330	35	2.6	.00	.00
27	.00	.00	.00	2570	3290	3310	3350	289	28	2.2	.00	.00
28	.00	.00	.00	2690	3300	3300	3370	253	23	2.0	.00	.00
29	.00	.00	.00	2760	---	3310	3400	226	20	1.8	.00	.00
30	.00	.00	.00	2770	---	3300	3430	204	18	1.5	.00	.00
31	.00	---	.00	2770	---	3290	---	192	---	1.2	.00	---
TOTAL	.00	.00	1.70	44910.00	84250	102610	100240	59615	2347	215.4	3.17	.00
MEAN	.00	.00	.05	1449	3009	3310	3341	1923	78.2	6.95	.10	.00
MAX	.00	.00	1.7	2770	3300	3350	3430	3470	180	15	1.0	.00
MIN	.00	.00	.00	.00	2760	3290	3300	192	18	1.2	.00	.00
AC-FT	.00	.00	3.4	89080	167100	203500	198800	118200	4660	427	6.3	.00

CAL YR 1984 TOTAL 117921.90 MEAN 322 MAX 3150 MIN .00 AC-FT 233900
WTR YR 1985 TOTAL 394192.27 MEAN 1080 MAX 3470 MIN .00 AC-FT 781900

09520500 GILA RIVER NEAR DOME, AZ

LOCATION.--Lat 32°45'39", long 114°25'11", in SW¼ sec.4, T.8 S., R.21 W., Yuma County, Hydrologic Unit 15070201, on right bank 440 ft upstream from McPhal bridge on old route of State Highway 95, 3 mi west of Dome, and 12 mi upstream from mouth.

DRAINAGE AREA.--57,850 mi^2, approximately - includes 373 mi^2 in Aubrey Valley Playa, a closed basin, but excludes all other closed basins.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1903 to current year. Monthly total, maximum, and minimum daily discharges only for January 1903 to December 1904 and January 1906 to July 1929 in WSP 918 or WSP 1313. Published as "at Yuma and Gila City" 1903, as "near Dome" 1904, and as "at Dome (Gila City)" 1905-6. Records for 1907-29 are published in WSP 918 as "at Yuma and at and near Dome."

REVISED RECORDS.--WSP 918: 1905. WSP 1733: July 1942. WSP 1926: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 139.18 ft, National Geodetic Vertical Datum of 1929. Prior to October 1903 and January 1907 to April 1929, no gage; discharge estimated. October 1903 to December 1906, principal nonrecording gage 4 mi upstream at datum 19.19 ft higher, supplemented by many nonrecording gages at different datums. May 1929 to May 31, 1981, at datum 9.00 ft higher.

REMARKS.--Records good. Many diversions above station for irrigation. Flow above station regulated by reservoirs at and above Painted Rock Dam; capacity of reservoir at Painted Rock Dam is 2,492,000 acre-ft. Painted Rock Reservoir, which is for flood control only, was completed in October 1959 (see also REMARKS for sta 09518000).

EXTREMES FOR PERIOD OF RECORD.--1903-29: Maximum daily discharge, 200,000 ft^3/s, roughly estimated, Jan. 22, 1916.
1929-59: Maximum discharge, 20,700 ft^3/s Feb. 15, 1932, gage height, 25.75 ft, present datum; no flow for part or all of most years.
1959-85: Maximum discharge, 4,820 ft^3/s Sept. 18, 1963, gage height, 16.20 ft; no flow for part or all of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,590 ft^3/s Mar. 13, gage height, 16.85 ft; minimum daily, 10 ft^3/s Oct. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	14	17	21	2530	3260	3410	3240	341	98	55	38
2	14	14	16	20	2640	3280	3370	3220	329	92	52	38
3	13	13	17	20	2700	3350	3340	3230	305	90	52	37
4	15	13	18	16	2750	3470	3370	3210	302	87	53	38
5	15	13	17	14	2750	3490	3370	3190	264	84	54	42
6	14	13	14	18	2640	3380	3360	3220	273	83	52	42
7	12	17	15	149	2610	3340	3290	3200	243	81	52	39
8	14	17	19	277	2580	3370	3330	3250	216	76	47	44
9	14	17	23	376	2550	3410	3290	3210	219	73	46	44
10	16	15	21	427	2560	3350	3330	3150	219	71	53	41
11	16	15	21	325	2590	3290	3290	3190	209	71	159	40
12	15	15	21	435	2600	3320	3330	3250	202	68	65	39
13	13	17	13	567	2630	3350	3280	3280	193	67	61	42
14	13	16	19	888	2630	3400	3250	3050	177	64	62	38
15	12	18	20	990	2660	3360	3280	2700	160	63	58	45
16	13	16	20	1140	2680	3370	3290	1950	166	61	54	40
17	11	17	19	1260	2800	3410	3240	1840	165	60	52	40
18	10	18	20	1380	2950	3420	3260	1740	149	57	50	44
19	10	18	18	1510	3050	3400	3300	1730	143	63	54	46
20	11	17	18	1610	3120	3430	3260	1600	141	65	54	47
21	11	17	19	1680	3160	3400	3180	1340	135	63	50	50
22	12	17	19	1730	3290	3430	3210	1130	127	59	54	49
23	12	22	18	1760	3340	3410	3270	963	128	59	51	44
24	12	21	20	1800	3240	3390	3210	820	130	58	48	42
25	13	22	19	1840	3210	3410	3150	712	124	56	47	44
26	13	21	18	1890	3220	3410	3200	616	119	54	50	43
27	15	20	18	1940	3250	3400	3250	538	106	54	44	43
28	14	19	20	2060	3250	3380	3280	479	101	58	42	89
29	13	19	20	2250	---	3340	3250	408	100	57	41	53
30	12	18	22	2350	---	3410	3230	383	98	59	40	59
31	14	---	22	2460	---	3440	---	371	---	57	37	---
TOTAL	409	509	581	33203	79980	104870	98470	64210	5584	2108	1689	1340
MEAN	13.2	17.0	18.7	1071	2856	3383	3282	2071	186	68.0	54.5	44.7
MAX	17	22	23	2460	3340	3490	3410	3280	341	98	159	89
MIN	10	13	13	14	2530	3260	3150	371	98	54	37	37
AC-FT	811	1010	1150	65860	158600	208000	195300	127400	11080	4180	3350	2660

CAL YR 1984 TOTAL 134115.1 MEAN 366 MAX 3120 MIN 7.2 AC-FT 266000
WTR YR 1985 TOTAL 392953 MEAN 1077 MAX 3490 MIN 10 AC-FT 779400

09520500 GILA RIVER NEAR DOME, AZ--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1983 to current year.
WATER TEMPERATURE: October 1983 to current year.

REMARKS.--Replacement site for water quality station 09520700, Gila River near Mouth, near Yuma, AZ. Water samples for conductance and water temperatures were collected by a local observer on an approximate daily basis.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum observed, 7,000 microsiemens Aug. 15, 1984; minimum observed, 849 microsiemens Jan. 14, 1985.
WATER TEMPERATURES: Maximum observed, 39.0°C Aug. 7-9, 1984; minimum observed, 11.0°C Dec. 13, Jan. 23, 24, 28, 29, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum observed, 3,930 microsiemens Dec. 15; minimum observed, 849 microsiemens Jan. 14.
WATER TEMPERATURES: Maximum observed, 30.0°C July 15, 16, 20, 22, 23, 27; minimum observed, 11.0°C Dec. 13, Jan. 23, 24, 28, 29.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 1984 27...	1050	18	3320	8.20	10.0	8.0	10	772	11.8	--	K36	K50
FEB 1985 20...	1030	3000	1200	8.30	18.0	14.5	70	760	9.4	93	K23	250
MAY 13...	1330	3310	1650	8.00	35.0	24.0	35	760	8.4	101	100	160
JUN 12...	1130	201	1950	8.30	34.5	24.0	10	760	8.5	102	89	K130
AUG 27...	1400	41	2060	8.10	38.0	32.0	1.5	764	8.5	--	24	K16

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV 1984 27...	570	350	130	60	530	10	6.9	277	0	227	550	630
FEB 1985 20...	240	92	63	21	160	5	5.3	187	0	153	110	220
MAY 13...	320	140	80	28	210	5	5.9	211	0	173	150	310
JUN 12...	360	150	88	34	260	6	7.1	257	0	211	210	390
AUG 27...	390	240	88	40	310	7	6.3	187	0	153	340	320

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
NOV 1984 27...	1.2	17	2090	2100	2.8	--	--	0.5	0.04	--	--	--
FEB 1985 20...	0.6	12	670	690	0.91	0.31	0.04	2.0	2.00	0.19	0.19	0.58
MAY 13...	0.8	12	940	900	1.3	0.19	0.04	1.0	0.65	0.35	0.32	0.98
JUN 12...	0.8	16	1150	1100	1.6	<0.10	0.06	0.6	0.21	0.12	0.11	0.34
AUG 27...	0.7	15	1230	1200	1.7	<0.10	0.04	0.4	0.04	0.02	<0.01	--

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09520500 GILA RIVER NEAR DOME, AZ--Continued

WATER QUALITY DATA

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
NOV 1984 27...	10	5	200	<10	<1	<1	<1	1	30	<1	160	70
FEB 1985 20...	20	7	55	0.6	<1	<1	<3	4	10	<1	78	<1
MAY 13...	20	10	75	2	<1	<1	<3	6	6	7	98	8
JUN 12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	<10	5	200	<10	<1	<1	1	1	20	<1	110	20

DATE	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
NOV 1984 27...	<0.1	27	1	1	<1	1900	13	<10	79	18	0.87
FEB 1985 20...	<0.1	<10	5	<1	<1	650	13	11	26	933	7560
MAY 13...	--	<10	6	<1	<1	870	12	9	18	730	6520
JUN 12...	--	--	--	--	--	--	--	--	65	36	20
AUG 27...	--	11	2	2	<1	3900	7	20	48	42	4.6

< Actual value is known to be less than value shown.

09520500 GILA RIVER NEAR DOME, AZ--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	1830	---	---	---	---
2	---	---	---	---	1210	2120	---	---	---	---	---	---
3	---	---	---	---	1220	2120	---	1860	---	---	---	2030
4	---	---	---	1020	1560	2020	---	---	---	---	---	2020
5	---	---	---	1020	---	2020	1160	2110	---	---	---	2010
6	---	---	---	966	1560	2270	1160	---	---	---	---	2020
7	---	---	---	965	---	2310	---	1860	---	2080	---	---
8	---	---	---	894	1450	1250	---	1860	---	1980	---	---
9	---	---	---	921	1460	1250	1180	---	---	---	---	---
10	---	---	---	885	---	1290	1170	1840	---	2050	---	2070
11	---	---	---	867	---	1250	---	---	---	---	---	---
12	---	---	3430	---	2300	---	1240	2100	---	2050	---	1880
13	---	---	3440	---	2390	1230	---	---	---	---	---	---
14	---	---	3300	849	---	1230	1240	---	---	---	---	---
15	---	---	3930	879	---	---	---	1840	---	2160	---	1890
16	---	---	3720	884	2380	---	---	1890	---	2180	---	---
17	---	---	3720	883	---	---	---	---	---	---	---	2110
18	---	---	2980	885	2370	---	1360	---	---	---	---	---
19	---	---	2970	882	---	---	---	---	---	---	---	---
20	---	---	---	---	---	2910	---	1890	---	2110	---	1980
21	---	---	---	---	1970	---	1370	---	---	---	---	---
22	---	---	---	---	1960	2900	1360	1840	---	2090	---	2090
23	---	---	---	1080	---	2900	1360	---	---	2100	---	2060
24	---	---	---	1090	---	---	---	---	---	---	---	---
25	---	---	---	---	1690	---	---	1880	---	---	---	---
26	---	---	---	---	1690	1130	---	1890	---	---	---	---
27	---	---	3740	---	1700	1120	1480	---	---	2100	---	---
28	---	---	3700	1210	---	1130	1480	---	---	---	---	1990
29	---	---	3740	1200	---	---	---	---	---	---	---	2120
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	3750	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	24.0	---	---	---	---
2	---	---	---	---	12.0	16.0	---	---	---	---	---	---
3	---	---	---	---	13.0	16.0	---	24.0	---	---	---	28.0
4	---	---	---	13.0	13.0	16.0	---	---	---	---	---	28.0
5	---	---	---	13.0	---	16.5	20.0	24.0	---	---	---	28.0
6	---	---	---	13.0	13.5	16.5	20.0	---	---	---	---	28.0
7	---	---	---	12.5	---	16.0	---	24.5	---	28.0	---	---
8	---	---	---	13.0	13.0	16.0	---	25.0	---	29.0	---	---
9	---	---	---	12.5	13.0	16.5	19.0	---	---	---	---	---
10	---	---	---	12.5	---	16.0	---	25.0	---	29.0	---	28.0
11	---	---	---	13.0	---	17.0	---	---	---	---	---	---
12	---	---	17.0	---	13.5	---	20.0	24.0	---	29.0	---	28.0
13	---	---	11.0	---	13.0	17.5	---	---	---	---	---	---
14	---	---	15.0	12.5	---	17.5	20.0	---	---	---	---	---
15	---	---	16.0	13.0	---	---	---	25.0	---	30.0	---	28.0
16	---	---	17.0	13.0	13.0	---	---	24.0	---	30.0	---	---
17	---	---	16.0	12.5	---	---	---	---	---	---	---	28.0
18	---	---	16.0	12.0	14.0	---	20.0	---	---	---	---	---
19	---	---	16.0	12.0	---	---	---	---	---	---	---	---
20	---	---	---	---	---	18.0	---	25.0	---	30.0	---	28.0
21	---	---	---	---	14.0	---	20.0	---	---	---	---	---
22	---	---	---	---	14.0	17.0	21.0	25.0	---	30.0	---	27.0
23	---	---	---	11.0	---	17.0	20.0	---	---	30.0	---	27.5
24	---	---	---	11.0	---	---	---	---	---	---	---	---
25	---	---	---	---	14.0	---	---	25.0	---	---	---	---
26	---	---	---	---	14.0	17.0	---	25.0	---	---	---	---
27	---	---	15.0	---	14.0	17.5	22.0	---	---	30.0	---	---
28	---	---	15.0	11.0	---	18.0	22.0	---	---	---	---	27.0
29	---	---	14.0	11.0	---	---	---	---	---	---	---	27.0
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	23.0	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

09521100 COLORADO RIVER BELOW YUMA MAIN CANAL WASTEWAY, AT YUMA, AZ

LOCATION.--Lat 32°43'54", long 114°37'55", in SW¼SW¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on right bank 1,000 ft downstream from Yuma Main Canal wasteway, 0.6 mi downstream from former gaging station on Colorado River at Yuma, 1.1 mi northwest of downtown post office in Yuma, 5.2 mi downstream from Gila River, and 6.4 mi upstream from northerly international boundary.

DRAINAGE AREA.--246,500 mi^2, approximately, including all closed basins entirely within the drainage boundary, also 3,959 mi^2 in Great Divide basin in southern Wyoming.

PERIOD OF RECORD.--October 1963 to current year. If records for Yuma Main Canal wasteway at Yuma (sta 09525000) and Reservation Main Drain No. 4 (sta 09530000) are subtracted from records at this station, records equivalent to those published 1902-64 as "Colorado River at Yuma" (sta 09521000) can be obtained.

GAGE.--Water-stage recorder. Datum of gage is 101.99 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft2/s Aug. 19, 1983, gage height, 26.67 ft; maximum gage height, 27.67 ft July 4, 1983; minimum daily discharge, 260 ft^3/s Jan. 17, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height since at least 1878, 34.0 ft Jan. 22, 1916, discharge, 250,000 ft^3/s, at former gaging station at Yuma.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,700 ft^3/s Feb. 6, gage height, 18.56 ft; minimum daily, 6,350 ft^3/s Apr. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12300	11400	16400	15800	14700	14800	8350	7490	9680	9500	9870	11200
2	12400	11700	16000	15800	15400	14900	8310	7240	10200	9560	9910	11200
3	12300	11900	15700	16100	17100	15100	8310	6890	10100	9420	9780	10900
4	12200	12500	15500	15900	18900	15200	8310	7030	9710	9530	10000	10800
5	12300	13700	15400	15800	19400	15000	8460	7110	9620	9710	9860	10600
6	12500	14100	15600	15500	19700	14700	8460	7100	9510	9570	9730	10400
7	12500	14200	15900	15200	19500	14300	7820	6610	9690	9690	9970	10000
8	12500	14300	15900	15200	19100	13700	7130	6620	9620	9730	10100	10200
9	12400	14300	16000	15300	18700	13000	7090	6630	9560	9480	9970	10500
10	12500	14600	16200	15400	18000	12600	6830	6500	9520	9540	9970	10400
11	12500	14900	16500	15700	17300	11600	6550	6470	9120	9470	9990	10200
12	12400	14800	16600	15800	16800	10900	6350	6780	9230	9520	10000	10100
13	12400	14600	16700	15700	16600	10700	6380	6930	9490	9730	9960	9710
14	12600	14400	16800	15500	16200	10700	6580	6800	9310	9940	9880	9190
15	12800	14400	16800	15300	15900	10900	6580	6590	9410	9760	10100	9190
16	12600	14500	16600	15200	15700	11100	6590	6820	9560	9840	9990	8770
17	12400	14600	16300	15200	15300	11400	6840	7390	9590	9720	9990	8480
18	12200	14700	16300	15400	15000	11400	7560	7590	9560	9790	10200	9120
19	12200	14800	16300	15400	14900	11200	8100	7940	9430	10000	10200	9940
20	12200	14800	16300	15500	15100	11000	8200	8150	9420	9930	10300	9740
21	12300	14800	16000	15700	15400	10800	8340	8480	9280	10400	10400	10400
22	11500	15000	15700	15100	15400	10600	8250	9000	9290	10300	10400	10900
23	10300	15300	15500	15000	15900	10600	8070	9220	9540	10100	10500	9860
24	10300	15600	15500	15000	16400	10500	8180	9100	9610	10200	10500	9190
25	10400	15900	15700	15200	16200	9880	8300	9490	9240	10100	10600	8660
26	10800	16300	15700	15300	15100	9600	8450	9810	9310	10100	10400	8390
27	11100	16600	15500	15500	14700	9520	8470	9490	9480	9960	10400	8520
28	11200	16700	15700	15500	14700	9290	8520	9230	9330	10100	10300	9190
29	11300	16600	16000	15200	---	8460	7630	9390	9550	10100	10600	9540
30	11300	16500	16100	15200	---	8080	7530	9230	9850	9960	10600	9690
31	11300	---	15900	15200	---	8290	---	9370	---	10100	10800	---
TOTAL	370000	438500	497100	478600	463100	359820	230540	242490	285810	304850	315270	294980
MEAN	11940	14620	16040	15440	16540	11610	7685	7822	9527	9834	10170	9833
MAX	12800	16700	16800	16100	19700	15200	8520	9810	10200	10400	10800	11200
MIN	10300	11400	15400	15000	14700	8080	6350	6470	9120	9420	9730	8390
AC-FT	733900	869800	986000	949300	918600	713700	457300	481000	566900	604700	625300	585100

CAL YR 1984 TOTAL 5340370 MEAN 14590 MAX 19200 MIN 9080 AC-FT 10590000
WTR YR 1985 TOTAL 4281060 MEAN 11730 MAX 19700 MIN 6350 AC-FT 8491000

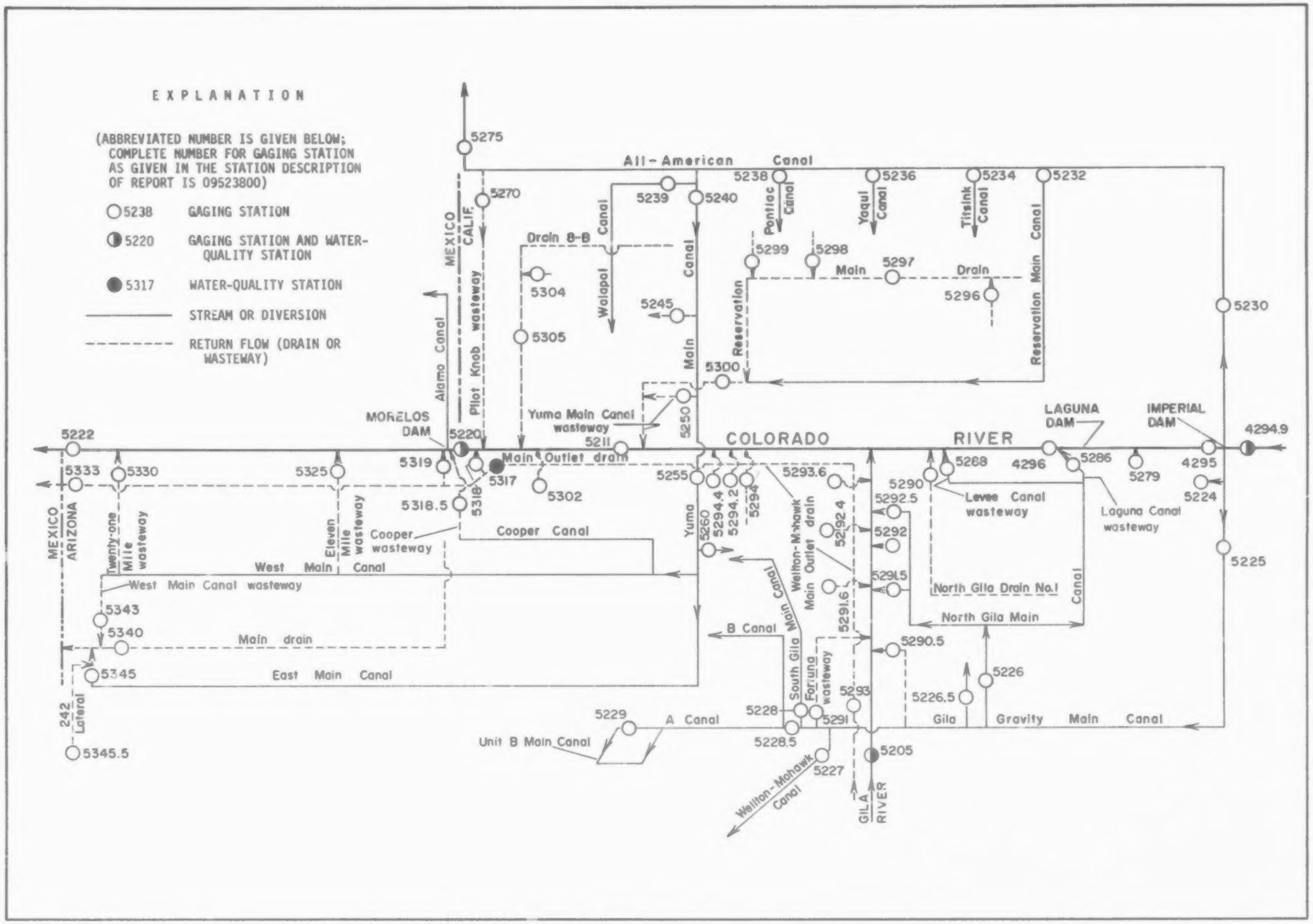

EXPLANATION
(ABBREVIATED NUMBER IS GIVEN BELOW; COMPLETE NUMBER FOR GAGING STATION AS GIVEN IN THE STATION DESCRIPTION OF REPORT IS 09523800)
○5238 GAGING STATION
◐5220 GAGING STATION AND WATER-QUALITY STATION
●5317 WATER-QUALITY STATION
STREAM OR DIVERSION
RETURN FLOW (DRAIN OR WASTEWAY)
5275
All-American Canal
5270
5239
5240
5238
Pontiac Canal
5236
Yaqui Canal
5234
Titsink Canal
5232
Reservation Main Canal
MEXICO
CALIF.
Drain 8-B
Walapai Canal
Main Canal
5299
5298
Main
5297
Drain
5296
Reservation
5304
5305
5245
5230
Alamo Canal
Pilot Knob wasteway
5300
Yuma Main Canal wasteway
5250
MORELOS DAM
5220
5211
COLORADO
RIVER
LAGUNA DAM
IMPERIAL DAM
4294.9
5222
5333
5330
5325
5319
5317
Main Outlet drain
5302
5318
5318.5
5255
5293.6
5268
4296
5286
5279
4295
5224
MEXICO
ARIZONA
Twenty-one Mile wasteway
Eleven Mile wasteway
Cooper wasteway
Cooper Canal
Yuma
5260
5294.4
5294.2
5294
Wellton-Mohawk Main Outlet drain
5292.4
5290
5292.5
5292
Levee Canal wasteway
Laguna Canal wasteway
5225
West Main Canal
West Main Canal wasteway
5291.5
North Gila Drain No.1
Canal
North Gila Main
5343
5340
Main drain
B Canal
South Gila Main Canal
5291.6
5290.5
Fortuna wasteway
5226
5226.5
5345
East Main Canal
5293
242 Lateral
5229
A Canal
5228
5291
Gila Gravity Main Canal
Unit B Main Canal
5228.5
5205
5345.5
5227
Wellton-Mohawk Canal
GILA RIVER

Figure 6.--Schematic diagram showing gaging stations and water-quality stations on streams, diversions, and return flows between Imperial Dam and the southerly international boundary.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY ABOVE MORELOS DAM, NEAR ANDRADE, CA

(National stream-quality accounting network)

LOCATION.--Lat 32°43'07", long 114°43'05", in NE¼SE¼ sec.21, T.8 S., R.24 W., Gila and Salt River meridian, in Arizona, Yuma County, Hydrologic Unit 15030108, on left bank at northerly international boundary, 0.5 mi east of Andrade, 1.1 mi upstream from Morelos Dam, 1.1 mi downstream from Rockwood Gate, and 6.4 mi downstream from gaging station on Colorado River below Yuma Main Canal wasteway.

DRAINAGE AREA.--246,700 mi^2, approximately, including all closed basins entirely within the drainage boundary, also 3,959 mi^2 in Great Divide basin in southern Wyoming.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1950 to current year. Prior to October 1958 published as "at international boundary."

GAGE.--Water-stage recorder. Datum of gage is mean sea level, National Geodetic Vertical Datum of 1929. Supplementary water-stage recorder 1,680 ft upstream at same datum.

REMARKS.--No estimated daily discharges. This record shows water passing northerly international boundary. Minor diversions to the United States below this station by pumping from ground water for irrigation in the floodway between river and Yuma levee.

COOPERATION.--Records furnished by International Boundary and Water Commission, U.S. Section (discharge figures rounded in accordance with Geological Survey standard practice).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,600 ft^3/s Aug. 20, 1983; maximum elevation, 115.65 ft Aug. 18, 19, 1983; minimum discharge, 495 ft^3/s Sept. 28, 1970; minimum elevation, 101.72 ft, Nov. 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 26,500 ft^3/s Feb. 6; minimum daily discharge, 10,600 ft^3/s Apr. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19000	19600	22200	23600	18600	22200	14900	12300	16700	15000	14900	18300
2	18800	19400	21800	23600	21000	22400	14300	12000	17900	15000	15200	17800
3	18500	19200	21600	23700	24100	23400	13300	12000	17500	14900	15200	16900
4	18600	19200	21500	23200	24900	22700	12600	12700	16300	15100	15900	16400
5	19100	19300	21700	23100	26200	22200	12700	13300	15700	15400	15500	16400
6	19500	19300	22100	22600	26500	22400	14100	12500	15100	15200	14900	16600
7	19600	19400	22800	22400	26400	21000	13900	11800	15300	15900	14900	16800
8	19300	19500	22900	22900	26000	19600	13100	12200	15200	15800	14700	17100
9	19200	19500	23500	22900	26400	19300	12200	11600	15100	15100	14700	16500
10	19400	19200	23900	23100	25800	19900	11300	11300	15300	15100	15200	16300
11	19200	19100	24200	23200	25600	18200	10600	12900	14900	14900	15900	16100
12	19500	18700	24200	23200	25400	17600	11100	14000	14900	15300	15700	16000
13	19500	19000	24100	23200	24400	17300	11500	13500	15500	15800	15100	16200
14	19900	18500	23900	22800	23400	17200	12000	12700	15700	16100	15000	16300
15	20000	19000	23700	22100	23000	17800	11200	11600	16200	15200	14500	16000
16	19600	19900	23300	21900	23200	18300	10800	11700	16500	15400	14700	15600
17	19500	20100	22900	22100	23500	19400	11000	12500	15700	15000	14900	15100
18	19400	20500	22300	22400	21800	18500	11200	13400	14800	15300	15900	15600
19	19800	19900	22900	22400	21900	18000	12400	14700	15000	16400	15200	18200
20	20600	19500	22700	22700	22100	17300	13300	14800	15200	16200	14900	17600
21	20700	19700	22100	22000	22400	16400	14200	13900	15200	17400	14900	18200
22	18100	20600	21400	21200	22500	16800	13600	14700	15400	16800	14800	18300
23	16000	21000	22100	21500	23700	17100	13700	15200	16100	15900	15100	16900
24	16200	21800	22500	21400	24300	17200	13700	15800	15800	15500	15700	15800
25	17300	22700	23100	21400	23200	15700	13500	16600	15300	15500	15800	14900
26	19200	23000	22700	21900	22500	15100	13800	17300	15700	15700	15900	14100
27	20200	22800	22900	22500	21900	14400	14400	16200	15900	15900	15600	15500
28	20000	22500	24200	21700	21300	14100	14600	15200	15900	16400	15400	17600
29	19300	21900	24100	21500	---	13100	13300	15600	16000	15800	15700	17600
30	18700	22000	23900	21400	---	13600	12400	15500	16600	15300	16400	17200
31	19200	---	23600	19900	---	15200	---	15700	---	15300	16900	---
TOTAL	592900	605800	710800	693500	662000	563400	384700	425200	472400	483600	475100	497900
MEAN	19130	20190	22930	22370	23640	18170	12820	13720	15750	15600	15330	16600
MAX	20700	23000	24200	23700	26500	23400	14900	17300	17900	17400	16900	18300
MIN	16000	18500	21400	19900	18600	13100	10600	11300	14800	14900	14500	14100
AC-FT	1176000	1202000	1410000	1376000	1313000	1118000	763100	843400	937000	959200	942400	987600

CAL YR 1984 TOTAL 7779500 MEAN 21260 MAX 27900 MIN 14200 AC-FT 15430000
WTR YR 1985 TOTAL 6567300 MEAN 17990 MAX 26500 MIN 10600 AC-FT 13030000

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1968 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to September 1984 (discontinued).

REMARKS.--Unpublished chemical analyses (continuing record) for water years 1961-68 available from district office in Tucson, Ariz.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
NOV 1984 26...	1430	23100	1050	8.00	15.5	14.5	18	760	10.0	99	<10
JAN 1985 14...	1445	22400	1050	7.90	17.5	11.0	28	765	11.1	101	--
FEB 12...	1345	25800	1070	7.90	21.5	12.0	28	769	11.0	101	17
MAY 20...	1500	14400	1180	7.80	31.5	24.0	15	760	8.9	106	25
JUN 10...	1515	15300	1020	7.90	38.0	26.0	13	758	8.1	101	46
AUG 26...	1600	15900	1000	7.80	42.0	28.0	6.8	764	7.6	--	15

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)
NOV 1984 26...	55	140	320	180	81	28	98	2	3.9	167	0
JAN 1985 14...	K11	190	300	160	78	26	91	2	4.0	167	0
FEB 12...	K4	67	310	180	79	27	100	3	4.1	164	0
MAY 20...	K40	340	310	170	79	28	120	3	4.7	178	0
JUN 10...	30	72	310	180	78	28	99	3	4.2	160	0
AUG 26...	80	93	300	180	76	27	93	2	4.2	145	0

DATE	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
NOV 1984 26...	137	270	84	0.3	8.9	659	660	0.9	--	0.30	0.26
JAN 1985 14...	137	250	83	0.3	8.8	650	620	0.88	--	--	0.30
FEB 12...	134	230	99	0.4	9.5	662	630	0.9	104	0.30	0.32
MAY 20...	146	250	130	0.4	7.9	728	710	0.99	68	0.20	--
JUN 10...	131	260	91	0.3	9.0	661	650	0.9	64	0.20	0.19
AUG 26...	119	240	77	0.4	9.5	639	600	0.87	26	0.20	0.19

K Based on non-ideal colonuy count.
< Actual value is known to be less than value shown.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

WATER QUALITY DATA

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
NOV 1984 26...	0.03	0.03	0.57	0.6	0.9	4.0	0.10	<0.01	<0.01	--	10
JAN 1985 14...	--	0.05	--	0.8	--	--	0.10	0.01	0.01	0.03	--
FEB 12...	0.06	0.05	0.84	0.9	1.2	5.3	0.12	0.02	0.03	0.09	<10
MAY 20...	0.06	--	--	--	--	--	--	--	--	--	<10
JUN 10...	0.08	0.06	0.32	0.4	0.6	2.7	0.08	0.02	<0.01	--	--
AUG 26...	0.03	0.04	0.37	0.4	0.6	2.7	0.03	0.02	0.02	0.06	<10

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
NOV 1984 26...	3	1	100	<0	130	<1	<1	29	<1	<3	19
JAN 1985 14...	--	--	--	--	--	--	--	--	--	--	--
FEB 12...	3	2	94	<0.5	150	<1	<1	7	<1	<3	12
MAY 20...	3	3	94	<0.5	180	<1	<1	7	<1	<3	60
JUN 10...	2	--	--	--	130	1	--	4	--	--	8
AUG 26...	3	2	100	<0.5	140	<1	<1	5	<1	<3	9

DATE	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)
NOV 1984 26...	3	--	6	11	<1	46	140	4	0.1	<0.1	<10
JAN 1985 14...	--	--	--	--	--	--	--	--	--	--	--
FEB 12...	3	--	9	8	1	47	240	12	0.3	<0.1	<10
MAY 20...	4	3700	4	17	6	59	170	4	0.1	--	<10
JUN 10...	--	--	--	9	--	--	100	--	<0.1	--	--
AUG 26...	2	1700	<3	4	<1	45	80	2	<0.1	--	<10

DATE	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)
NOV 1984 26...	3	--	3	<1	1100	<6	20	7	--	--
JAN 1985 14...	--	--	--	--	--	--	--	--	--	--
FEB 12...	1	3	2	<1	1000	<6	30	15	--	--
MAY 20...	2	3	3	<1	1000	<6	20	19	--	--
JUN 10...	--	1	--	--	--	--	70	--	<15	1.2
AUG 26...	1	3	2	<1	1000	<6	70	5	8.3	<1.1

< Actual value is known to be less than value shown.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

WATER-QUALITY DATA

DATE	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 1984										
26...	--	--	--	--	--	--	--	16	476	29700
JAN 1985										
14...	--	--	--	--	--	--	--	27	632	38200
FEB										
12...	--	--	--	--	--	--	--	11	787	54800
MAY										
20...	--	--	--	--	--	--	--	25	312	12100
JUN										
10...	<8.9	2.0	<7.7	1.7	0.1	5.0	--	19	343	14200
AUG										
26...	5.9	1.4	3.7	1.4	0.13	--	4.1	16	251	10800

ADDITIONAL CHEMICAL ANALYSIS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
OCT 1984							
16...	1300	19300	1090	7.80	23.0	20.0	0.20
31...	1500	19300	1080	7.70	22.5	18.0	0.20
NOV							
20...	1430	19600	1080	7.90	24.0	16.0	0.30
30...	1215	21800	1040	8.00	21.0	13.5	0.30
DEC							
17...	1455	22700	1020	7.90	16.5	13.0	0.30
31...	0825	23500	1030	7.70	10.0	12.0	0.30
JAN 1985							
11...	1425	23000	1010	7.80	14.0	10.0	0.30
21...	1445	21900	1010	7.80	16.5	12.0	0.30
FEB							
04...	1150	22500	1040	7.80	10.5	10.0	0.40
15...	0830	22600	1080	7.80	20.5	12.0	0.30
MAR							
13...	1040	17300	1160	8.10	22.0	14.0	0.50
25...	1310	15300	1160	8.00	24.5	17.0	0.40
APR							
19...	1350	13600	1160	7.80	28.0	23.0	0.30
29...	1450	12800	1260	8.10	31.0	21.0	0.30
MAY							
13...	1430	13100	1370	8.00	31.5	23.5	0.20
24...	1400	16000	1120	7.80	35.0	25.0	0.20
JUN							
07...	1330	15600	1050	7.80	43.5	25.5	0.20
18...	1435	17400	1030	7.80	37.0	27.0	0.20
JUL							
15...	1215	15100	1030	7.80	34.5	27.0	0.20
26...	1045	15300	1020	7.70	34.0	27.0	0.20
AUG							
19...	1240	15000	1000	7.90	38.0	28.0	0.20
30...	1440	16800	998	7.70	37.0	28.5	0.20
SEP							
03...	0915	16800	994	7.90	25.0	29.0	0.20
07...	1335	17000	1080	7.80	31.0	24.0	0.20

< Actual value is known to be less than value shown.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

ADDITIONAL CHEMICAL ANALYSIS

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
OCT 1984						
16...	0.05	--	<0.2	--	--	0.04
31...	0.01	--	<0.2	--	--	0.04
NOV						
20...	0.05	0.45	0.5	0.8	3.5	0.06
30...	0.02	0.88	0.9	1.2	5.3	0.07
DEC						
17...	0.04	0.36	0.4	0.7	3.1	0.08
31...	0.05	0.45	0.5	0.8	3.5	0.07
JAN 1985						
11...	0.02	0.28	0.3	0.6	2.7	0.11
21...	0.04	0.26	0.3	0.6	2.7	0.12
FEB						
04...	0.08	0.52	0.6	1.0	4.4	0.16
15...	0.04	1.4	1.4	1.7	7.5	0.13
MAR						
13...	0.05	0.45	0.5	1.0	4.4	0.28
25...	0.03	0.67	0.7	1.1	4.9	0.23
APR						
19...	0.06	0.64	0.7	1.0	4.4	0.15
29...	0.06	0.74	0.8	1.1	4.9	0.26
MAY						
13...	0.07	0.83	0.9	1.1	4.9	0.31
24...	0.07	0.53	0.6	0.8	3.5	0.04
JUN						
07...	0.07	1.3	1.4	1.6	7.1	0.08
18...	0.08	0.32	0.4	0.6	2.7	0.26
JUL						
15...	0.05	0.25	0.3	0.5	2.2	0.05
26...	0.04	0.46	0.5	0.7	3.1	0.04
AUG						
19...	0.03	0.37	0.4	0.6	2.7	0.04
30...	0.04	0.26	0.3	0.5	2.2	<0.01
SEP						
03...	0.04	0.26	0.3	0.5	2.2	0.04
07...	0.06	0.24	0.3	0.5	2.2	0.03

< Actual value is known to be less than value shown.

09522200 COLORADO RIVER AT SOUTHERLY INTERNATIONAL BOUNDARY, NEAR SAN LUIS, AZ

LOCATION.--Lat 32°29'48", long 114°48'48", in Mexico, on right bank about 1,000 ft upstream from southerly international boundary, 2 mi west of San Luis, Ariz., and 21.9 mi, downstream from Morelos Dam.

DRAINAGE AREA.--246,700 mi^2, approximately, including all closed basins entirely within the drainage boundary, also 3,959 mi^2 in Great Divide basin in southern Wyoming.

PERIOD OF RECORD.--January 1950 to September 1985. Publication by U.S. Geological Survey discontinued; records available in publications of the International Boundary and Water Commission. Prior to October 1960, monthly discharge only published in WSP 1733.

GAGE.--Water-stage recorder. Datum of gage is mean sea level, National Geodetic Vertical Datum of 1929. Prior to June 24, 1954, at site 1,100 ft downstream at same datum. August 1956 to September 1966, supplementary water-stage recorders at various sites within 6 mi upstream used to compute discharge during periods of backwater from diversion dike downstream.

REMARKS.--No estimated daily discharges. This record shows water passing southerly international boundary. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for municipal use and irrigation, and return flow from irrigated areas.

COOPERATION.--Records furnished by International Boundary and Water Commission, U.S. Section (discharge figures rounded in accordance with Geological Survey standard practice).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,100 ft^3/s Aug. 19, 20, 1983, elevation 83.30 ft, maximum elevation, 84.84 ft Nov. 29, 1957; no flow at times 1956-58, 1964-69, 1971-72, 1975, 1977-79, 1981-83.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 23,500 ft^3/s Feb. 7; minimum daily, 5,420 ft^3/s Apr. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16200	17000	19600	21700	17100	18800	9600	7980	13800	10800	10500	12400
2	16200	17600	19900	21400	17200	19000	8690	7950	15100	10200	10100	13600
3	16100	17600	20100	21200	19100	18800	8290	7090	15500	10400	10300	12800
4	15700	17000	19600	21300	21700	18600	7770	7890	14800	10400	10600	12600
5	16000	17500	19500	21100	22800	18100	7540	9510	13800	10500	11100	12400
6	17100	17900	19500	20900	23100	18000	8140	8130	13100	10500	10200	12600
7	17600	17900	20100	20300	23500	17700	8950	7520	12800	10400	10200	12800
8	17400	17300	20800	21000	23400	16400	8500	7890	12700	10900	10100	13100
9	16900	17100	21600	21400	23400	16100	8220	8120	12400	10400	9840	13200
10	16900	17300	22000	21400	23100	16400	7580	7890	12700	10400	10100	12900
11	16900	17200	23000	21200	22900	15800	6820	9300	12100	10400	10700	12800
12	16700	17000	23000	21100	23100	14600	5910	10200	11900	10300	11200	12600
13	16800	17100	22300	21100	22200	14600	6300	10200	12300	10700	10400	12600
14	16800	16700	22300	20900	20800	14700	6730	9840	12600	11100	10300	12700
15	16000	16800	22000	20800	20000	14700	6900	9170	12500	11100	9980	12600
16	15000	16900	21800	19500	20000	14800	5660	9420	12500	10500	9840	12500
17	14800	17200	21500	19500	20300	14300	5420	9270	12300	10700	10000	11900
18	15100	17400	21300	19600	19700	14000	5890	10400	11200	10600	10600	11900
19	14900	17700	20800	19600	19300	13300	7440	11200	10900	11200	11000	14500
20	15000	17500	20600	19300	19100	12500	8290	11800	10800	11600	10200	15100
21	14800	17700	20900	19200	18900	12000	8720	11300	10200	12000	10300	15400
22	14600	18200	20000	18400	18300	12000	8240	11500	9800	12500	10200	15800
23	14200	18800	20000	18500	19400	12000	7620	12300	10100	11600	10300	15300
24	14800	19200	20600	18300	20900	12300	8270	12700	10500	11000	10800	14200
25	15000	19600	21200	17900	20600	12100	8370	13200	10100	10800	11100	13500
26	17200	20200	21500	18400	20400	12100	8280	13600	9660	10800	11300	12700
27	17400	20300	20800	19200	19500	11300	8820	12400	10400	11000	10800	12900
28	17500	19900	21700	18600	18100	10700	9390	12400	10700	11100	10700	14600
29	17300	19500	22500	18300	---	10100	8850	12500	10900	11600	10700	14800
30	16900	19300	22700	18400	---	9510	7840	12900	10900	10700	10900	14600
31	16700	---	22100	17900	---	10000	---	13200	---	10600	11600	---
TOTAL	500500	538400	655300	617400	577900	445310	233040	318770	359060	336800	325960	401400
MEAN	16150	17950	21140	19920	20640	14360	7768	10280	11970	10860	10510	13380
MAX	17600	20300	23000	21700	23500	19000	9600	13600	15500	12500	11600	15800
MIN	14200	16700	19500	17900	17100	9510	5420	7090	9660	10200	9840	11900
AC-FT	992700	1068000	1300000	1225000	1146000	883300	462200	632300	712200	668000	646500	796200

CAL YR 1984 TOTAL 6399360 MEAN 17480 MAX 24400 MIN 9560 AC-FT 12690000
WTR YR 1985 TOTAL 5309840 MEAN 14550 MAX 23500 MIN 5420 AC-FT 10530000

Diversions for irrigation in the Gila Project in Arizona are made at Imperial Dam by the Gila Gravity Main Canal. Diversions for irrigation in the Yuma Project in Arizona and California are made at Imperial Dam by the All-American Canal. Between Imperial Dam and the international boundary secondary diversions from these principal canals are made to divisions of the Gila and Yuma Projects.

Between Imperial Dam and the international boundary return surface flows from irrigated areas enter the Colorado River through many drains and wasteways in Arizona and California. Other return flows enter the Gila River below the gaging station near Dome (09520500). In addition, return flows collected by the Main Drain and East Main Canal are delivered across the international boundary for use in Mexico.

See figure 6 on p. 264 for schematic diagram showing location of diversions and return flows.

Diversions at and below Imperial Dam, AZ-CA

09522500. GILA GRAVITY MAIN CANAL AT IMPERIAL DAM.--See p. 275.

09522600. NORTH GILA MAIN CANAL.

LOCATION.--Water-stage recorder and sharp-crested weir in SW¼SW¼ sec.23, T.7 S., R.22 W., Hydrologic Unit 15030107, about 700 ft downstream from turnout from Gila Gravity Main Canal and 1.2 mi south of Laguna Dam.

PERIOD OF RECORD.--October 1965 to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation in North Gila Valley.

09522650. NORTH GILA MAIN CANAL NO. 2.

LOCATION.--Water-stage recorder in SW¼NW¼ sec.11, T.8 S., R.22 W., Hydrologic Unit 15070201, at turnout from Gila Gravity Main Canal and 3.5 mi downstream from turnout to North Gila Main Canal.

PERIOD OF RECORD.--June 1969 to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation of land in North Gila Valley.

09522700. WELLTON-MOHAWK CANAL.

LOCATION.--Two water-stage recorders to record forebay and tailrace elevations and gate openings since June 1, 1974, in NW¼NE¼ sec.17, T.8 S., R.21 W., Hydrologic Unit 15070201, at turnout from Gila Main Canal.

PERIOD OF RECORD.--October 1965 to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation in the Dome, Wellton, and Mohawk areas of the lower Gila Valley.

COOPERATION.--Supplementary record of gate openings furnished by U.S. Bureau of Reclamation.

09522800. SOUTH GILA MAIN CANAL.

LOCATION.--Sparling flowmeter in SE¼SW¼ sec.36, T.8 S., R.22 W., Hydrologic Unit 15070201, 110 ft downstream from turnout from Gila Gravity Main Canal.

PERIOD OF RECORD.--October 1965 to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation in South Gila Valley; additional diversions are made from Gila Gravity Main Canal to supply other portions of this same acreage.

COOPERATION.--Daily discharge figures furnished by Yuma Irrigation District.

09522850. GILA GRAVITY MAIN CANAL AT PUMPING PLANT.

LOCATION.--Intake consisting of 4 pumps in NE¼NW¼ sec.1, T.9 S., R.22 W., Hydrologic Unit 15070201, at end of Gila Gravity Main Canal and head of Yuma Mesa canals.

PERIOD OF RECORD.--October 1965 to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation on Yuma Mesa and in Yuma Auxiliary Divistion of Yuma Valley.

COOPERATION.--Records furnished by U.S. Bureau of Reclamation and Yuma Mesa Irrigation and Drainage District.

09522900. UNIT B MAIN CANAL.

LOCATION.--Headworks in NW¼SW¼ sec.28, T.9 S., R.23 W., Hydrologic Unit 15030108, 5 mi northeast of Somerton.

PERIOD OF RECORD.--October 1965 to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation in Yuma Auxiliary Division of the Yuma Project.

COOPERATION.--Records furnished by U.S. Bureau of Reclamation and Yuma Mesa Irrigation and Drainage District.

09523000. ALL-AMERICAN CANAL NEAR IMPERIAL DAM.--See p. 276.

Diversions at and below Imperial Dam, AZ-CA--Continued

09523200. RESERVATION MAIN CANAL.

LOCATION.--Water-stage recorder and, since Sept. 5, 1975, gate-opening recorder, in NE¼NE¼ sec.35, T.15 S., R.23 E., Hydrologic Unit 15030107, San Bernardino meridian, at turnout from All-American Canal and 5.8 mi downstream from Imperial Dam.

PERIOD OF RECORD.--August 1950 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record computed from rated gate on turnout from All-American Canal and shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

COOPERATION.--Record of gate openings furnished by Bard Water District (prior to January 1983 by U.S. Bureau of Reclamation); these are used for comparison to recorder and for determining missing record on gate recorder.

09523400. TITSINK CANAL.

LOCATION.--Water-stage recorder and Parshall flume in NE¼SW¼ sec.27, T.15 S., R.23 E., Hydrologic Unit 15030107, San Bernardino meridian, 0.6 mi downstream from turnout from All-American Canal and 7.2 mi downstream from Imperial Dam.

PERIOD OF RECORD.--August 1950 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09523600. YAQUI CANAL.

LOCATION.--Water-stage recorder and Parshall flume in NW¼SE¼ sec.31, T.15 S., R.23 E., Hydrologic Unit 15030107, San Bernardino meridian, 700 ft downstream from turnout from All-American Canal and 11.1 mi downstream from Imperial Dam.

PERIOD OF RECORD.--June 1950 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09523800. PONTIAC CANAL.

LOCATION.--Water-stage recorder and Parshall flume in NW¼SW¼ sec.1, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian, 500 ft downstream from turnout from All-American Canal and 13.1 mi downstream from Imperial Dam.

PERIOD OF RECORD.--August 1950 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09523900. WALAPAI CANAL.

LOCATION.--Water-stage recorder and sharp-crested weir in SE¼SE¼ sec.10, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian, 100 ft downstream from siphon-drop powerplant forebay and 4.3 mi north of Yuma.

PERIOD OF RECORD.--October 1946 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09524000. YUMA MAIN CANAL AT SIPHON-DROP POWERPLANT.--See p. 277.

09524500. DIVERSIONS FROM YUMA MAIN CANAL BETWEEN SIPHON-DROP POWERPLANT AND YUMA MAIN CANAL WASTEWAY.

LOCATION.--Turnouts for several canals diverting from Yuma Main Canal between siphon-drop powerplant, 4 mi north of Yuma, and Yuma Main Canal wasteway, 1,600 ft upstream from Colorado River siphon.

PERIOD OF RECORD.--October 1940 to current year (monthly discharge only). Prior to October 1947 published in WSP 1313. October 1947 to September 1965 published as supplemental table with records for Yuma Main Canal at siphon-drop powerplant.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

COOPERATION.--Record furnished by U.S. Bureau of Reclamation.

Diversions at and below Imperial Dam, AZ-CA--Continued

09525500. YUMA MAIN CANAL BELOW COLORADO RIVER SIPHON.--See p. 279.

09526000. DIVERSION FROM YUMA MAIN CANAL FOR MUNICIPAL SUPPLY FOR YUMA.
LOCATION.--Sparling and Venturi flowmeters, in NW¼NE¼ sec.35, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian, on two pipelines, respectively, about 1,000 ft downstream from intake, which is at outlet of Colorado River siphon of Yuma Main Canal, on Arizona side of Colorado River at Yuma.

PERIOD OF RECORD.--June 1945 to current year (monthly discharge only). Prior to October 1973 published as a supplemental table with records for Yuma Main Canal below Colorado River siphon.

REMARKS.--Record shows water for Yuma municipal supply; prior to 1962 was supplement only to total Yuma municipal supply. Figures shown in table herewith are also included in record for Yuma Main Canal below Colorado River siphon (sta 09525500).

COOPERATION.--Records furnished by Yuma County Water Users' Association.

09527500. ALL-AMERICAN CANAL BELOW PILOT KNOB WASTEWAY.--See p. 281.

Diversions at and below Imperial Dam, AZ-CA--Continued

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	North Gila Main Canal 09522600	North Gila Main Canal No. 2 09522650	Wellton-Mohawk Canal 09522700	South Gila Main Canal 09522800	Gila Gravity Main Canal at pumping plant 09522850
October	3,060	618	23,190	3,440	18,600
November	2,000	572	20,660	2,170	12,046
December	1,370	192	7,350	1,010	3,374
CAL YR 1984	32,300	7,490	391,400	31,740	236,598
January	2,410	309	13,380	1,370	11,097
February	2,990	566	21,100	2,110	11,225
March	3,870	725	32,500	3,190	15,484
April	4,690	1,010	43,330	4,190	25,248
May	5,180	783	39,810	4,130	30,289
June	3,570	939	44,770	2,360	32,436
July	4,310	924	48,880	2,980	36,094
August	2,590	873	53,540	3,570	33,859
September	2,750	690	37,060	4,530	19,874
WTR YR 1985	38,790	8,200	385,600	35,040	249,626

Month	Unit B Main Canal 09522900	Reservation Main Canal 09523200	Titsink Canal 09523400	Yaqui Canal 09523600	Pontiac Canal 09523800
October	3,029	3,690	70	634	737
November	1,656	1,590	0	271	179
December	652	1,110	50	166	162
CAL YR 1984	32,932	41,000	531	8,030	5,490
January	1,530	2,560	26	538	462
February	1,714	3,050	38	616	696
March	1,990	4,580	51	859	390
April	3,423	6,090	90	1,070	582
May	3,597	5,030	56	1,080	538
June	3,627	4,150	42	850	385
July	4,375	4,650	62	1,090	793
August	4,115	4,600	26	801	536
September	2,799	2,910	41	433	488
WTR YR 1985	32,507	44,020	551	8,410	5,950

Month	Walapai Canal 09523900	Diversions from Yuma Main Canal 09524500	Diversions from Yuma Main Canal for Yuma supply 09526000
October	385	513	1,450
November	600	164	1,098
December	118	193	905
CAL YR 1984	5,970	6,200	15,547
January	536	258	958
February	528	394	928
March	723	671	1,207
April	918	660	1,436
May	551	474	1,629
June	258	522	1,750
July	475	880	1,998
August	543	755	1,924
September	318	271	1,443
WTR YR 1985	5,950	5,750	16,726

NOTE.--Yearly totals given above have been computed from total cfs-days and may differ slightly from the summation of monthly total acre-feet on occasion.

09522500 GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, AZ-CA

LOCATION.--Lat 32°52'34", long 114°27'18", in SE¼SW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, Yuma County, Hydrologic Unit 15030107, on right bank 3,200 ft downstream from intake at east end of Imperial Dam.

PERIOD OF RECORD.--August 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 160.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good except those below 500 ft^3/s, which are fair. Gila Gravity Main Canal diverts water from Colorado River at left end of Imperial Dam for irrigation of lands in the Gila Project area in Arizona. Diversions to this canal began Aug. 17, 1943. Diversions to North Gila Valley from this canal began Dec. 16, 1954.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,240 ft^3/s May 25, 1965; no flow at canal intake at times in several years when intake gates were closed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	802	70	27	1170	889	1600	1520	1040	1640	1870	812
2	1120	736	549	161	749	537	1740	1460	767	1810	1650	1440
3	1210	467	1050	417	330	312	1800	1300	1440	1920	1490	1660
4	1130	453	789	319	587	1160	1590	899	1690	1590	1170	1750
5	965	1040	686	215	477	1470	1160	676	1760	1570	1850	1690
6	633	1150	493	239	402	1320	884	1590	1830	1260	1870	1700
7	543	1070	306	406	357	1340	827	2060	1410	1110	2030	1270
8	895	1020	223	283	354	950	1680	1980	1220	1810	2030	958
9	990	720	120	363	238	703	1790	1840	1150	1990	1840	1390
10	1090	595	164	419	133	533	1790	1750	1640	2090	1510	1460
11	1050	505	41	288	689	1230	1990	995	1870	1980	1100	1660
12	760	1120	39	231	784	1230	1770	680	1880	1720	1830	1630
13	491	1300	162	262	814	1190	1590	1470	1480	1330	1820	1070
14	363	1290	36	628	945	1120	1410	1810	1560	1190	2010	995
15	1030	1080	130	629	739	694	1890	1750	1310	1760	1900	921
16	1040	1100	157	604	571	619	1890	1570	1090	1760	1720	1550
17	1260	738	297	442	516	389	1870	1320	1650	1760	1380	1540
18	1050	646	227	445	1080	1210	1600	1070	1680	1770	955	1030
19	858	1160	188	403	1080	1070	1300	707	1670	1670	1620	749
20	599	1240	298	250	1260	1190	830	1450	1730	1420	1720	673
21	446	1150	264	832	717	1110	682	1590	1740	987	1920	477
22	1090	563	201	855	875	873	1930	1610	1410	1730	1860	493
23	1180	436	291	860	670	609	1720	1700	1030	1740	1390	1180
24	1340	211	156	717	353	535	2010	1390	1820	1750	1390	1110
25	972	23	119	550	1110	1270	1780	865	2020	1820	1070	1250
26	665	.00	397	290	1110	1560	1650	653	1850	1470	1510	1460
27	490	.00	246	328	1330	1600	933	1260	1810	1260	1550	891
28	334	.00	30	963	1300	1060	709	1360	1580	876	1670	634
29	882	.00	28	890	---	1070	1530	1250	1220	1720	1670	433
30	831	.00	134	993	---	821	1580	1450	975	1720	1580	385
31	782	---	123	952	---	801	---	1440	---	1740	1250	---
TOTAL	27139	20615.00	8014	15261	20740	30465	45525	42465	45432	49963	50225	34261
MEAN	875	687	259	492	741	983	1518	1370	1514	1612	1620	1142
MAX	1340	1300	1050	993	1330	1600	2010	2060	2020	2090	2030	1750
MIN	334	.00	28	27	133	312	682	653	767	876	955	385
AC-FT	53830	40890	15900	30270	41140	60430	90300	84230	90110	99100	99620	67960

CAL YR 1984 TOTAL 380529.00 MEAN 1040 MAX 2010 MIN .00 AC-FT 754800
WTR YR 1985 TOTAL 390105.00 MEAN 1069 MAX 2090 MIN .00 AC-FT 773800

09523000 ALL-AMERICAN CANAL NEAR IMPERIAL DAM, AZ-CA

LOCATION.--Lat 32°52'17", long 114°28'47", in SE¼NW¼ sec.17, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on left bank 6,000 ft downstream from intake at west end of Imperial Dam and 13.7 mi upstream from turnout to Yuma Main Canal.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1939 monthly discharge only, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft, National Geodetic Vertical Datum of 1929 (subject to undetermined changes caused by earthquake of May 18, 1940). Since Aug. 21, 1952, auxiliary water-stage recorder 18.5 mi downstream from base gage.

REMARKS.--No estimated daily discharges. Records excellent. All-American Canal diverts water from Colorado River at Imperial Dam. Water is used for power development and for irrigation in Yuma, Coachella, and Imperial Valleys. Water can be released back to the river through Pilot Knob powerplant and wasteway for power, regulatory purposes, or for downstream use in Mexico. First diversion to All-American Canal began October 1938, but prior to October 1940 was used only for priming canal.

COOPERATION.--Daily discharge figures furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 14,400 ft^3/s, Apr. 17, July 15, 16, 1980; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12100	11900	8970	8950	9030	12000	12000	12100	12100	12000	12000	11900
2	12100	11900	8960	8950	8960	12000	12000	12100	12100	12000	12000	12000
3	12100	11900	8920	9010	8960	11900	12000	12000	12100	12000	12000	12000
4	12100	9090	8910	9010	9040	11900	12100	12000	12100	12000	12000	12000
5	12100	8660	8910	9000	9050	12000	12100	12000	12100	12000	12100	12100
6	12000	9130	8910	9000	9040	11900	12100	12000	12100	12000	12100	12000
7	12100	9160	8980	9020	9040	11900	12100	12000	12100	12000	12100	12000
8	12000	9080	8980	9020	9040	11900	11900	12000	12100	12100	12000	12000
9	12000	9070	8980	9020	9350	11900	11900	12000	12100	12100	12000	12100
10	12000	9070	9070	9010	10300	11900	11900	12000	11900	12100	12000	12100
11	12000	9070	9070	9010	12100	12100	11900	12000	11900	12100	12000	12100
12	12000	9040	9070	9010	11800	12100	11900	12000	11900	12100	12100	12000
13	12000	9040	9010	9000	11900	12100	11900	12000	11900	12100	12100	12000
14	12000	9040	9000	9060	12100	12100	11900	12000	11900	12000	12100	12000
15	12000	9030	9000	9070	12100	12100	12200	12000	11900	12000	12100	12000
16	12100	9030	9020	9060	12100	12100	12300	12000	11900	11900	12100	11800
17	12100	9030	9070	9040	12100	12100	12000	12000	12000	12000	12100	11900
18	12000	9030	9060	9050	12200	12000	12100	12000	12000	12100	12100	11900
19	12000	9030	9060	9050	12200	11900	12100	11900	12000	12000	12100	11900
20	12000	9030	9050	9030	12300	11900	12000	12000	12000	12100	12100	11900
21	12000	9030	9040	9080	12200	12000	12000	12000	12100	12100	12000	11900
22	11900	9050	9040	9080	12200	11900	12000	12000	12000	12100	12100	11900
23	11900	9060	9050	9060	12200	11900	12000	12000	12000	12100	12100	12000
24	11900	9060	9030	9020	12200	11900	12000	12000	12100	12100	12100	12100
25	11900	9050	9010	9020	12000	12100	11900	12000	12100	12000	12100	12100
26	11900	8950	9020	9020	12000	12100	11900	11900	12000	12000	12000	12000
27	11900	8950	9050	9020	12000	12100	11900	12100	12000	12000	12000	12000
28	11900	8960	9050	8950	12000	12000	11900	12100	12000	12000	12000	12000
29	12100	8960	9040	8950	---	12000	12100	12100	12000	12000	12000	12100
30	12100	8970	9040	8950	---	12000	12100	12100	12000	12000	11900	12000
31	12100	---	8950	8940	---	12000	---	12100	---	12000	11900	---
TOTAL	372400	279370	279320	279460	309510	371800	360200	372500	360500	373100	373400	359800
MEAN	12010	9312	9010	9015	11050	11990	12010	12020	12020	12040	12050	11990
MAX	12100	11900	9070	9080	12300	12100	12300	12100	12100	12100	12100	12100
MIN	11900	8660	8910	8940	8960	11900	11900	11900	11900	11900	11900	11800
AC-FT	738700	554100	554000	554300	613900	737500	714500	738900	715100	740000	740600	713700

CAL YR 1984 TOTAL 4168950 MEAN 11390 MAX 12400 MIN 6240 AC-FT 8269000
WTR YR 1985 TOTAL 4091360 MEAN 11210 MAX 12300 MIN 8660 AC-FT 8115000

09524000 YUMA MAIN CANAL AT SIPHON-DROP POWERPLANT, NEAR YUMA, AZ

LOCATION.--Lat 32°46'36", long 114°38'05", in SE¼SE¼ sec.10, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on right bank at downstream end of powerplant, 500 ft from turnout from All-American Canal to Yuma Main Canal, 4.0 mi north of Yuma, and 14.9 mi downstream from intake of All-American Canal at Imperial Dam.

PERIOD OF RECORD.--July 1926 to current year. Prior to October 1938, monthly discharge only published in WSP 1313. Diversions from All-American Canal and Yuma Main Canal previously published with this record are listed separately in this report.

GAGE.--Water-stage recorders on two rated by-pass gates to record gate openings. Datum of gage is 135.8 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records are fair above 100 ft^3/s and poor below. Discharge through bypass gates determined from relationship of forebay elevation and gate openings. Flow to Yuma Main Canal regulated by opening and closing bypass gates. Gates on All-American Canal open and close automatically to maintain a constant forebay elevation. Records of daily discharge show quantity of water diverted from All-American Canal to Yuma Main Canal, except that diverted from forebay of powerplant to Walapai Canal. (See sta 09523900.) Flow through turbines of powerplant was discontinued Dec. 8, 1972.

COOPERATION.--Gate opening changes and forebay elevations furnished by Yuma County Water Users' Association.

EXTREMES.--1930 to current year: Maximum daily discharge, 2,040 ft^3/s Nov. 11, 1943; no flow for several days in 1937-39, 1945.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	568	351	26	463	514	228	706	400	513	775	255
2	563	481	149	65	336	477	325	680	229	566	725	295
3	602	291	96	123	91	193	447	628	339	575	616	369
4	614	15	127	143	107	172	812	469	409	531	279	466
5	619	24	209	145	116	238	863	158	423	492	257	477
6	580	35	456	133	169	355	668	274	526	507	255	389
7	444	166	443	178	467	683	484	329	520	342	362	332
8	454	527	306	197	443	687	524	394	552	437	822	295
9	450	570	212	197	303	476	674	777	465	523	885	295
10	467	460	119	239	132	348	799	689	493	652	699	361
11	514	365	72	778	87	457	845	569	578	653	465	437
12	453	416	100	197	261	574	868	440	565	539	474	471
13	424	401	90	141	438	603	665	510	509	495	469	413
14	379	430	89	134	566	671	312	595	561	422	459	359
15	345	436	120	245	630	614	316	654	526	503	698	368
16	371	426	83	324	535	525	365	652	383	599	724	363
17	404	350	126	320	309	151	447	550	375	646	582	349
18	492	302	199	269	361	140	758	398	918	601	440	342
19	480	337	277	304	355	236	754	175	539	470	454	292
20	377	354	465	276	362	304	708	222	535	400	557	298
21	302	383	463	375	586	601	615	319	457	351	582	351
22	379	296	383	469	554	708	664	377	406	393	591	372
23	418	228	257	467	460	672	788	569	309	555	480	460
24	444	221	152	466	317	523	816	436	412	670	428	485
25	520	192	86	398	443	563	705	388	585	706	326	529
26	576	195	156	305	500	668	617	315	587	681	394	566
27	566	294	107	212	577	678	467	336	623	584	447	516
28	432	381	26	254	571	676	349	323	628	475	431	442
29	477	372	26	416	---	682	627	431	543	564	460	232
30	527	364	30	527	---	602	738	427	429	714	445	296
31	560	---	26	532	---	246	---	453	---	757	329	---
TOTAL	14693	9881	5801	8856	10539	15037	18251	14243	14824	16917	15911	11475
MEAN	474	329	187	286	376	485	608	459	494	546	513	383
MAX	619	570	465	778	630	708	868	777	918	757	885	566
MIN	302	15	26	26	87	140	228	158	229	342	255	232
AC-FT	29140	19600	11510	17570	20900	29830	36200	28250	29400	33550	31560	22760

CAL YR 1984 TOTAL 153643 MEAN 420 MAX 838 MIN 15 AC-FT 304700
WTR YR 1985 TOTAL 156428 MEAN 429 MAX 918 MIN 15 AC-FT 310300

09525000 YUMA MAIN CANAL WASTEWAY AT YUMA, AZ

LOCATION.--Lat 32°44'00", long 114°37'20", in SW¼SE¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, 45 ft downstream from wasteway gates from Yuma Main Canal which are 1,645 ft upstream from intake of Colorado River siphon on Yuma Main Canal, 0.5 mi north of Yuma, and 3.2 mi downstream from siphon-drop powerplant on Yuma Main Canal.

PERIOD OF RECORD.--April 1913 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder for low flows only, with supplementary recorder on wasteway gate. Datum of gage is 122.51 ft, National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1968, gate-opening record used for low flows only.

REMARKS.--No estimated daily discharges. Records good except those below 150 ft^3/s, which are fair. The wasteway discharges into Colorado River in SW¼ sec.26, T.16 S., R.22 E., 1,000 ft upstream from station on Colorado River below Yuma Main Canal wasteway at Yuma. Discharges above 100 ft^3/s are generally computed as difference between discharge of Yuma Main Canal at siphon-drop powerplant and Yuma Main Canal below Colorado River siphon, with deductions for small irrigation diversions from canal between these stations. Discharges below 100 ft^3/s are generally computed from stage- discharge relation. Records do not include flow of Reservation Main Drain No. 4.

EXTREMES.--1930 to current year: Maximum daily discharge, 2,020 ft^3/s Dec. 24, 25, 1948; no flow for several days in 1937-39, 1945, 1950, 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	7.7	8.2	6.0	8.3	7.9	9.8	8.9	8.0	18	9.2	15
2	6.8	11	8.4	6.0	7.9	7.6	9.2	12	7.7	9.7	12	13
3	7.0	14	14	6.0	16	10	12	11	8.3	9.4	13	13
4	7.6	159	8.4	9.2	8.3	10	9.2	12	11	9.2	12	13
5	7.5	2.0	8.3	6.0	8.4	7.7	8.0	17	10	9.5	11	18
6	10	2.0	7.7	9.4	8.2	7.6	7.7	7.7	7.7	9.8	12	14
7	9.9	17	7.7	9.3	8.4	6.8	8.0	13	10	12	10	12
8	10	6.8	7.7	8.4	8.2	7.1	9.6	6.9	11	9.9	9.4	12
9	13	8.8	11	8.8	8.6	7.2	8.4	8.1	9.8	10	10	14
10	14	9.6	8.1	8.6	23	18	8.4	6.8	8.6	9.4	9.5	12
11	11	7.7	7.7	480	13	7.7	8.0	8.5	7.2	9.6	18	18
12	9.2	7.7	7.9	8.9	9.2	7.2	7.7	13	6.8	9.5	13	17
13	10	8.8	8.5	8.4	8.4	7.7	9.5	6.8	6.8	22	16	13
14	9.3	7.7	8.9	8.4	8.2	7.7	8.0	6.8	6.8	17	14	27
15	9.0	7.7	6.8	8.4	7.8	7.7	7.7	6.8	8.0	10	13	26
16	11	8.0	6.8	8.5	7.7	7.7	7.7	6.1	6.9	10	9.4	14
17	8.4	7.7	6.8	8.4	7.7	8.0	9.3	6.3	16	10	10	14
18	8.4	7.7	8.5	8.4	8.2	7.9	11	6.8	440	9.7	10	27
19	14	7.7	6.3	8.7	8.4	7.7	6.7	14	9.0	14	9.6	16
20	8.4	7.7	6.0	8.7	8.4	7.7	6.8	9.4	8.9	12	9.2	20
21	8.4	7.7	6.0	8.6	8.0	7.7	6.8	7.2	21	9.8	9.2	18
22	8.4	9.4	6.0	8.4	8.1	7.1	6.8	7.0	11	9.8	9.1	21
23	12	40	6.0	8.4	8.4	6.8	6.7	6.7	11	9.7	15	19
24	10	21	5.7	8.4	8.4	6.8	7.2	6.7	11	11	16	20
25	8.2	28	7.0	11	8.3	7.7	7.8	6.6	13	9.4	13	16
26	7.7	14	8.4	9.1	8.4	7.7	8.5	7.6	11	9.4	18	13
27	8.9	9.2	6.0	9.5	8.1	7.7	8.3	7.6	9.8	12	18	24
28	8.6	9.0	6.0	9.8	7.7	7.7	8.2	11	9.6	11	14	28
29	7.7	8.4	6.0	9.2	---	8.5	7.7	8.5	9.2	9.2	15	18
30	7.7	8.4	6.0	9.2	---	11	7.7	7.6	9.2	9.2	18	13
31	7.7	---	6.0	8.6	---	9.8	---	7.7	---	9.2	16	---
TOTAL	286.8	471.4	232.8	734.7	257.7	255.4	248.4	272.1	724.3	340.4	391.6	518
MEAN	9.25	15.7	7.51	23.7	9.20	8.24	8.28	8.78	24.1	11.0	12.6	17.3
MAX	14	159	14	480	23	18	12	17	440	22	18	28
MIN	6.8	2.0	5.7	6.0	7.7	6.8	6.7	6.1	6.8	9.2	9.1	12
AC-FT	569	935	462	1460	511	507	493	540	1440	675	777	1030

CAL YR 1984 TOTAL 3431.5 MEAN 9.38 MAX 159 MIN 2.0 AC-FT 6810
WTR YR 1985 TOTAL 4733.6 MEAN 13.0 MAX 480 MIN 2.0 AC-FT 9390

09525500 YUMA MAIN CANAL BELOW COLORADO RIVER SIPHON, AT YUMA, AZ

LOCATION.--Two gages, one at each end of canal siphon passing under Colorado River. At intake, lat 32°43'49", long 114°37'09", in NE¼NE¼ sec.35, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on left bank 1,645 ft downstream from center of Yuma Main Canal wasteway gates and 3.5 mi downstream from siphon-drop power-plant. At outlet, in NW¼NE¼ sec.35, T.16 S., R.22 E., San Bernardino meridian, in Arizona, Yuma County, on right bank. Siphon crossing is 1,300 ft upstream from 4th Avenue bridge over Colorado River at Yuma.

PERIOD OF RECORD.--January 1924 to current year. Prior to October 1938, monthly discharge only published in WSP 1313. Diversion from Yuma Main Canal for municipal supply for Yuma (sta 09526000), published with this record prior to October 1973, is listed separately in this report.

REVISED RECORDS.--WSP 1713: 1958, 1959 (Yuma municipal supply).

GAGE.--Water-stage recorder at each end of siphon. Datum of each gage is 100.62 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1963, at datum 0.05 ft lower. Elevation of sill of inlet is 125.5 ft above NGVD. Prior to Oct. 29, 1938, nonrecording gages at approximately same sites, read simultaneously.

REMARKS.--No estimated daily discharges. Records good except those below 100 ft^3/s, which are poor. Daily discharge computed from relation between discharge and head on siphon, which is the difference between intake and outlet gages. Records show quantity of water delivered through Colorado River siphon for irrigation in the Valley Division of the Yuma Project and for supplementary municipal supply for city of Yuma (see sta 09526000).

EXTREMES.--1930 to current year: Maximum daily discharge, 948 ft^3/s Aug. 16, 1962; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	546	367	62	461	489	240	651	398	496	694	235
2	546	450	153	62	328	440	308	631	220	540	655	300
3	578	325	76	124	70	144	426	587	342	540	568	349
4	588	53	114	134	104	162	749	437	421	495	277	453
5	591	.00	225	144	118	218	790	122	435	497	235	451
6	561	.00	447	114	156	347	622	253	507	516	241	388
7	437	147	430	188	435	639	451	327	504	364	389	338
8	412	521	310	188	416	639	509	405	554	421	762	299
9	412	546	188	188	276	464	652	741	470	520	807	304
10	437	447	124	238	103	343	757	663	474	648	654	360
11	478	363	62	298	70	421	770	560	550	612	451	412
12	444	396	76	188	239	541	797	439	555	516	444	435
13	415	386	76	124	422	563	645	508	514	463	436	390
14	376	422	76	124	545	615	334	587	538	412	448	333
15	350	410	124	232	601	563	326	641	495	503	660	348
16	358	409	76	313	517	491	364	631	370	599	666	350
17	415	354	114	302	296	134	423	544	363	625	560	344
18	501	315	196	238	339	134	707	403	478	569	435	327
19	481	338	258	312	322	232	696	141	539	456	444	292
20	380	358	453	264	341	314	660	192	519	408	521	285
21	332	382	450	345	562	573	590	334	463	355	552	343
22	372	295	374	444	535	633	632	392	423	377	558	362
23	426	204	232	459	444	603	731	572	339	526	456	446
24	440	204	134	446	309	482	732	458	417	636	414	463
25	517	162	62	390	400	534	629	381	554	672	335	504
26	564	180	171	312	452	629	567	307	568	636	371	526
27	553	319	114	188	548	630	451	337	611	564	416	450
28	419	401	62	232	501	640	364	307	606	476	401	391
29	461	389	62	397	---	649	594	431	530	535	432	203
30	514	378	46	520	---	578	680	440	426	660	420	297
31	532	---	62	518	---	258	---	453	---	701	333	---
TOTAL	14343	9700.00	5714	8088	9910	14102	17196	13875	14183	16338	15035	10978
MEAN	463	323	184	261	354	455	573	448	473	527	485	366
MAX	591	546	453	520	601	649	797	741	611	701	807	526
MIN	332	.00	46	62	70	134	240	122	220	355	235	203
AC-FT	28450	19240	11330	16040	19660	27970	34110	27520	28130	32410	29820	21770

CAL YR 1984 TOTAL 146341.00 MEAN 400 MAX 777 MIN .00 AC-FT 290300
WTR YR 1985 TOTAL 149462.00 MEAN 409 MAX 807 MIN .00 AC-FT 296500

09527000 PILOT KNOB POWERPLANT AND WASTEWAY NEAR PILOT KNOB, CA

LOCATION.--Lat 32°44'15", long 114°42'58", in NW¼SW¼ sec.25, T.16 S., R.21 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 2 mi east of summit of Pilot Knob, 6 mi west of Yuma, AZ, and 20.8 mi downstream from intake of All-American Canal at Imperial Dam.

PERIOD OF RECORD.--February 1939 to current year. Prior to October 1943 monthly discharge only, published in WSP 1313. Prior to October 1956, published as Pilot Knob wasteway near Pilot Knob.

GAGE.--Water-stage recorder in forebay on right bank of All-American Canal (also used as auxiliary gage for sta 09527500); tailrace gage with remote recorder logged hourly in control house; calibrated wicket gates for turbine flow and calibrated bypass gates for wasteway flow which are logged for each change. Datum of forebay staff gage is 150.00 ft; that of tailrace staff gage is 0.00 ft; elevation of sill of bypass gates is 147.88 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records excellent. Daily discharge computed from head and gate openings on wicket gates. Records show water released through Pilot Knob powerplant and wasteway from All-American Canal and returned to Colorado River through Rockwood gates. Pilot Knob wasteway completed in summer of 1938 and first flow occurred Feb. 5, 1939. Pilot Knob powerplant was completed in January 1957 and first flow occurred Jan. 14, 1957. See table below for monthly return flow by Pilot Knob wasteway only.

COOPERATION.--Daily discharge figures furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 9,600 ft^3/s Feb. 4, 1983; no flow for long periods.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7110	7730	6620	8240	4090	6860	5930	4610	6750	5550	4900	7260
2	6790	7930	6730	8050	5090	6960	5450	4670	7370	5570	5090	6660
3	6450	8470	6530	8050	6200	7500	5040	4750	6960	5580	5350	6400
4	6640	6810	6530	7980	5860	7300	4160	5760	6290	5600	5920	5760
5	6870	5490	6550	8150	6470	6860	4110	6200	5900	5760	5450	5830
6	7240	5670	6740	8130	6510	6770	5310	5380	5510	5630	5340	6350
7	7410	5430	6860	7780	6230	6720	6170	5280	5660	6110	5330	6930
8	7210	4800	7070	7780	6260	6870	5300	5360	5520	5740	4950	7390
9	7070	5010	7370	7490	7090	7480	4630	5080	5700	5680	5030	6850
10	7070	5870	7400	7580	7810	8150	3960	4910	5530	5520	5690	6740
11	7060	5970	8120	7040	9520	7400	3770	6110	5480	5430	5810	6640
12	7280	5080	7850	7670	8810	7100	4480	6580	5530	5660	5460	6370
13	7370	5370	7650	7790	7820	6750	5160	6140	5580	6190	5330	6620
14	7650	4910	7700	7180	7530	6460	5540	5560	6070	6130	5190	7020
15	7590	4830	7850	6650	7540	6840	4540	5090	6650	5410	4650	7090
16	7400	5220	7790	6470	7950	7260	4150	4660	6750	5680	4960	6770
17	7400	5550	7230	6270	8280	7940	4530	4940	6090	5410	5340	6520
18	7050	6190	6580	6200	7380	7330	4140	5640	5230	5640	5730	6530
19	7340	6040	6940	6160	7360	7030	4640	6550	5620	6380	5070	8220
20	7770	5780	6870	6430	7500	6570	5260	6410	5580	6430	5020	8000
21	7790	5820	6390	5460	6810	5640	5580	5610	5760	6930	5080	8110
22	7620	6480	6150	4950	7370	5800	5070	5790	6110	6540	5200	7920
23	7400	6570	7270	5270	8070	6180	4870	6000	6510	6080	5330	7480
24	7390	7080	7710	5350	8650	6190	4870	6760	6340	5530	5990	7050
25	7480	7200	7960	5190	7960	5650	4460	7100	5840	5560	6010	6510
26	7730	7060	7410	5580	7440	5350	4530	7380	6420	5760	5750	6370
27	8120	6780	7660	6090	6810	5010	5600	6440	6190	5980	5530	7420
28	8200	6670	8490	5420	6370	5030	5940	6090	6350	6180	5300	8420
29	7930	6120	8180	4960	---	5410	5140	6090	6230	5510	5310	8500
30	7680	6190	8330	4560	---	5940	4700	6000	6360	5190	5980	7960
31	7690	---	8370	4440	---	6810	---	6310	---	5100	6340	---
TOTAL	228800	184140	226910	204370	200790	205160	147030	179250	181880	179460	167430	211690
MEAN	7381	6138	7320	6593	7171	6618	4901	5782	6063	5789	5401	7056
MAX	8200	8470	8490	8240	9520	8150	6170	7380	7370	6930	6340	8500
MIN	6450	4800	6150	4440	4090	5010	3770	4610	5230	5100	4650	5760
AC-FT	453800	365200	450100	405400	398300	406900	291600	355500	360800	356000	332100	419900
(*)	0	57200	128100	112400	22900	0	0	0	0	0	3740	0

CAL YR 1984 TOTAL 2452618 MEAN 6701 MAX 9430 MIN 384 AC-FT 4865000 * 185300
WTR YR 1985 TOTAL 2316910 MEAN 6348 MAX 9520 MIN 3770 AC-FT 4596000 * 324340

* Return flow, in acre-feet, by Pilot Knob wasteway (included in daily discharge table).

09527500 ALL-AMERICAN CANAL BELOW PILOT KNOB WASTEWAY, CA

LOCATION.--Lat 32°44'07", long 114°43'23", in NW¼SE¼ sec.26, T.16 S., R.21 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, on left bank 0.4 mi downstream from Pilot Knob wasteway, 6 mi west of Yuma, Ariz., 15 mi upstream from turnout to Coachella Canal, and 21.2 mi downstream from intake at Imperial Dam.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft above National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder on right bank 0.4 mi upstream used to determine head on Pilot Knob check gates (also used as forebay gage for sta 09527000, Pilot Knob powerplant and wasteway). Datum of auxiliary gage is 150.00 ft above NGVD.

REMARKS.--No estimated daily discharges. Records excellent. Water is used for power development at four sites below station, and for irrigation in Coachella and Imperial Valleys.

COOPERATION.--Daily discharge figures furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,610 ft^3/s Apr. 27, 28, 1976; no flow Jan. 4, 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4330	3510	1910	739	4130	4420	5540	6390	4680	5490	5890	4140
2	4600	3340	1910	904	3440	4180	5860	6380	4160	5480	5840	4650
3	4890	2730	2250	889	2590	3860	6080	6230	4350	5480	5730	4950
4	4710	2190	2230	967	3030	4090	6520	5770	4990	5490	5520	5500
5	4480	2790	2130	798	2360	4650	6560	5460	5390	5380	5920	5500
6	4110	3240	1740	860	2270	4690	5880	5960	5640	5490	6020	5070
7	4090	3390	1740	1090	2290	4410	5220	6020	5550	5260	5950	4560
8	4210	3600	1670	1070	2290	4260	5870	5910	5590	5310	5940	4150
9	4360	3400	1390	1450	1980	3850	6310	5910	5500	5310	5890	4590
10	4340	2580	1450	1240	2010	3140	6690	6050	5500	5390	5450	4670
11	4230	2520	871	1230	2420	3860	6800	5240	5490	5470	5450	4670
12	4030	3390	1060	1210	2390	4060	6250	4920	5490	5320	5690	4810
13	3990	3080	1120	1180	3370	4430	5860	5240	5490	4910	5790	4720
14	3780	3490	1120	1660	3860	4720	5870	5700	5060	5040	5950	4390
15	3980	3610	1010	2040	3950	4500	6810	6030	4550	5600	6210	4290
16	4030	3260	1140	2250	3700	4100	7060	6340	4550	5390	6020	4520
17	3980	3030	1500	2470	3400	3590	6740	6180	5170	5550	5770	4860
18	4240	2460	2080	2570	4270	4150	6630	5780	5570	5470	5590	4860
19	4030	2540	1620	2630	4320	4410	6360	5150	5530	4960	5980	2960
20	3590	2820	1550	2280	4100	4780	5870	5140	5590	4990	5990	3280
21	3590	2680	1940	3140	4600	5380	5700	5750	5480	4500	5930	3130
22	3750	2120	2260	3640	4160	5110	6070	5590	5270	4770	5850	3330
23	3990	2120	1400	3330	3480	4820	6160	5230	4960	5090	5780	3920
24	4050	1540	1050	3110	2820	4930	6160	4640	4940	5480	5290	4460
25	3950	1440	866	3340	3280	5410	6350	4340	5300	5460	5280	4920
26	3610	1540	1290	2990	3880	5710	6370	4100	4830	5350	5460	4990
27	3260	1810	1210	2470	4550	5990	5620	4970	4910	5170	5630	4070
28	3240	1870	389	3140	4910	5950	5480	5370	4810	5060	5850	2840
29	3450	2470	702	3540	---	5680	6050	5220	4980	5500	5780	2840
30	3820	2410	601	3690	---	5350	6330	5260	4960	5660	5230	3450
31	3770	---	594	3940	---	4870	---	5030	---	5750	5030	---
TOTAL	124500	80980	43813	65887	93900	143380	185110	171340	154300	164580	177700	129110
MEAN	4016	2699	1413	2125	3354	4625	6170	5527	5143	5309	5732	4304
MAX	4890	3610	2260	3940	4910	5990	7060	6390	5640	5750	6210	5500
MIN	3240	1440	389	739	1980	3140	5220	4100	4160	4500	5030	2840
AC-FT	246900	160600	86900	130700	186300	284400	367200	339900	306100	326400	352500	256100

CAL YR 1984 TOTAL 1535663 MEAN 4195 MAX 6550 MIN 389 AC-FT 3046000
WTR YR 1985 TOTAL 1534600 MEAN 4204 MAX 7060 MIN 389 AC-FT 3044000

Return surface flows below Imperial Dam, AZ-CA

095250000. YUMA MAIN CANAL WASTEWAY.--See p. 278.

095270000. PILOT KNOB POWERPLANT AND WASTEWAY.--See p. 280.

09527900. MITTRY LAKE OUTLET CHANNEL.

LOCATION.--Water-stage recorder and sharp-crested weir, in NW¼SE¼ sec.14, T.7 S., R.22 W., Hydrologic Unit 15030107, 1,000 ft upstream from outlet to Colorado River and Laguna Dam.

PERIOD OF RECORD.--October 1974 to current year (monthly discharge only).

REMARKS.--Record shows return flow to Colorado River from Mittry Lake. Prior to Nov. 6, 1974, records furnished by Bureau of Reclamation. No discharge record, October 1, 1984 to March 31, 1985, gage inundated by Colorado River.

09528600. LAGUNA CANAL WASTEWAY.

LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SW¼ sec.14, T.7 S., R.22 W., Hydrologic Unit 15030107, 1,000 ft downstream from Laguna Dam and 0.7 mi upstream from outlet to Colorado River.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Colorado River.

09528800. LEVEE CANAL WASTEWAY.

LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SW¼ sec.4, T.8 S., R.22 W., Hydrologic Unit 15030107, 1,000 ft upstream from outlet to Colorado River.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Colorado River.

09529000. NORTH GILA DRAIN NO. 1.

LOCATION.--Water-stage recorder, in SE¼SW¼ sec.4, T.8 S., R.22 W., Hydrologic Unit 15030107, 0.25 mi upstream from outlet to Colorado River and 5.5 mi downstream from Laguna Dam.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Records shows waste water from North Gila Valley Irrigation District returned to Colorado River.

09529050. NORTH GILA DRAIN NO. 3.

LOCATION.--Drain enters wasteway to Gila River in NE¼NE¼ sec.18, T.8 S., R.21 W., Hydrologic Unit 15070201, 1,000 ft upstream from Gila River.

PERIOD OF RECORD.--April 1962 to current year (monthly discharge only).

REMARKS.--Record shows seepage from Gila Gravity Main Canal.

09529100. FORTUNA WASTEWAY.

LOCATION.--Water-stage recorder and sharp-crested weir, in NE¼ sec.30, T.8 S., R.21 W., Hydrologic Unit 15070201, 1.3 mi upstream from Gila River.

PERIOD OF RECORD.--October 1960 to September 1963, October 1964 to current year (monthly discharge only).

REMARKS.--Record shows waste water spilled from Gila Gravity Main Canal; flow rarely reaches Gila River.

09529150. NORTH GILA MAIN CANAL WASTEWAY.

LOCATION.--Water-stage recorder in NE¼NW¼ sec.22, T.8 S., R.22 W., Hydrologic Unit 15070201, 1,000 ft upstream from outlet to Gila River.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Record shows waste water from North Gila Valley Irrigation District. Prior to July 1966 record shows waste water less flow diverted for irrigation between gage and Gila River.

09529160. SOUTH GILA PUMP OUTLET CHANNEL NO. 3.

LOCATION.--In NW¼SE¼ sec.22, T.8 S., R.22 W., Hydrologic Unit 15070201, 0.5 mi upstream from outlet to Gila River. Aug. 1, 1965, to Aug. 31, 1981, water-stage recorder at present site.

PERIOD OF RECORD.--January 1965 to current year (monthly discharge only).

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit and conveyed by concrete channel to Gila River.

COOPERATION.--Records furnished by U.S. Bureau of Reclamation since Sept. 1, 1981.

Return surface flows below Imperial Dam, AZ-CA--Continued

09529200. BRUCE CHURCH DRAIN.
LOCATION.--At culvert in NW¼NE¼ sec.21, T.8 S., R.22 W., Hydrologic Unit 15070201, 0.2 mi upstream from outlet to Gila River.

PERIOD OF RECORD.--April 1962 to current year (monthly discharge only).

REMARKS.--Record shows seepage water from parts of secs. 15, 16, and 21 (Bruce Church Ranch). Flow generally computed by interpolation between discharge measurements; prior to Nov. 30, 1970, and May to September 1979, flow determined from pump rating.

09529240. SOUTH GILA PUMP OUTLET CHANNEL NO. 2.
LOCATION.--In SW¼NW¼ sec.28, T.8 S., R.22 W., Hydrologic Unit 15070201, 0.6 mi upstream from outlet to Gila River; prior to Oct. 18, 1965, outlet was to Wellton-Mohawk Main Outlet Drain.

PERIOD OF RECORD.--January 1962 to current year (monthly discharge only).

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit and conveyed by concrete channel to the Gila River.

COOPERATION.--Record furnished by U.S. Bureau of Reclamation since Sept. 1, 1981.

09529250. BRUCE CHURCH WASTEWAY.
LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SE¼ sec.20, T.8 S., R.22 W., Hydrologic Unit 15070201, 500 ft upstream from outlet to Gila River.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Gila River.

09529300. WELLTON-MOHAWK MAIN OUTLET DRAIN (CONVEYANCE CHANNEL).
LOCATION.--Water-stage recorder and Parshall flume in NE¼NW¼ sec.17, T.8 S., R.21 W., Hydrologic Unit 15070201, 7.8 mi upstream from outlet to Gila River (M.O.D.E. 1), which is 0.6 mi upstream from mouth of Gila River.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Record shows water pumped from numerous wells in Wellton-Mohawk Irrigation and Drainage District to lower the water table. Flow can be discharged to the Gila River or Colorado River by any one of or combination of five outlets. These outlets are: M.O.D.E. 1 (release to Gila River about 7.8 mi below station); an overflow flume about 11.3 mi below station releases water to Colorado River; M.O.D.E. 2 (see sta 09531800) releases water to Colorado River above Morelos Dam; and M.O.D.E. 3 (see sta 09531900) releases water to Colorado River below Morelos Dam. Since June 1977 discharge of drain has been released to Wellton-Mohawk Bypass Drain and measured at Arizona-Sonora boundary (see sta 09533300). For water year 1985, water was released into the Gila River through M.O.D.E. 1.

09529360. SOUTH GILA PUMP OUTLET CHANNEL NO. 1.
LOCATION.--In SW¼NE¼ sec.30, T.8 S., R.22 W., Hydrologic Unit 15070201, 0.2 mi upstream from outlet to Gila River, which is 0.6 mi upstream from mouth of Gila River.

PERIOD OF RECORD.--August 1961 to current year (monthly discharge only).

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit and conveyed by concrete channel to Gila River.

COOPERATION.--Record furnished by U.S. Bureau of Reclamation since Sept. 1, 1981.

09529400. SOUTH GILA DRAIN NO. 2.
LOCATION.--Near center of sec.24, T.8 S., R.23 W., Hydrologic Unit 15030107, at outlet to Colorado River.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Record shows ground-water drainage and occasional waste water from South Gila Valley Unit returned to Colorado River.

09529420. SOUTH GILA TERMINAL WASTEWAY.
LOCATION.--Water-stage recorder and Parshall flume in SW¼NW¼ sec.36, T.8 S., R.23 W., Hydrologic Unit 15030107, 2.0 mi upstream from outlet to Colorado River.

PERIOD OF RECORD.--March 1965 to current year (monthly discharge only).

REMARKS.--Record shows waste water from South Gila Canal of South Gila Valley Unit returned to Colorado River.

09529440. SOUTH GILA PUMP OUTLET CHANNEL NO. 4.
LOCATION.--In NW¼NW¼ sec.26, T.8 S., R.23 W., Hydrologic Unit 15030107, 1.5 mi upstream from outlet to Colorado River.

PERIOD OF RECORD.--July 1965 to current year (monthly discharge only).

REMARKS.--Records show water pumped from wells in South Gila Valley Unit and conveyed by buried pipe and some open unlined channel to Colorado River.

COOPERATION.--Records furnished by U.S. Bureau of Reclamation since Sept. 1, 1981.

Return surface flows below Imperial Dam, AZ-CA--Continued

09529600. RESERVATION DRAIN NO. 7.
LOCATION.--At downstream end of culvert on State Road 24 (formerly Avenue C), in NE¼NE¼ sec.33, T.15 S., R.23 E., Hydrologic Unit 15030107, San Bernardino meridian, 0.5 mi upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record shows drainage water from sec.34, T.15 S., R.23 E., and is used with sta 09529700 to determine seepage from All-American Canal.

09529700. RESERVATION MAIN DRAIN NO. 6.
LOCATION.--Nonrecording gage on upstream right piling of Stallnacker Road Bridge (formerly 9th Street Bridge), in SE¼SW¼ sec.32, T.15 S., R.23 E., Hydrologic Unit 15030107, San Bernardino meridian.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record shows waste and drainage water from the Reservation Division, and is used with sta 09529600 to determine seepage from All-American Canal, which parallels drain for 4 mi.

09529800. RESERVATION DRAIN NO. 2.
LOCATION.--At upstream side of bridge on White Road, in SW¼NW¼ sec.6, T.16 S., R.23 E., Hydrologic Unit 15030107, San Bernardino meridian, 0.9 mi upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record used to compute seepage from All-American Canal in sec.31, T.15 S., R.22 E.

09529900. RESERVATION DRAIN NO. 3.
LOCATION.--At Jackson Road Bridge (formerly 5th Street Bridge), in SE¼SE¼ sec.10, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian, 1.0 mi upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record used to compute seepage from All-American Canal upstream from Yuma Main Canal.

09530000. RESERVATION MAIN DRAIN NO. 4.
LOCATION.--Water-stage recorder in NW¼SE¼ sec.26, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian, 500 ft upstream from railroad culvert.

PERIOD OF RECORD.--January 1913 to April 1920, October 1921 to March 1925, January 1934 to current year (monthly discharge only) (calendar year discharge only 1934-36). Prior to October 1955, published as California drainage canal.

REMARKS.--Record shows waste and drainage water from area east of Yuma Main Canal on Reservation Division. Since 1939, seepage from All-American Canal has caused large increase. Flow is not included in the record of Yuma Main Canal wasteway.

09530200. YUMA MESA OUTLET DRAIN.
LOCATION.--In SE¼SW¼ sec.28, T.16 S., R.22 E., Hydrologic Unit 15030108, San Bernardino meridian, in Arizona, Yuma County, 0.3 mi from outlet to Colorado River.

PERIOD OF RECORD.--July 1970 to current year (monthly discharge only).

REMARKS.--Record shows water pumped from wells on the Yuma Mesa and conveyed by underground conduit to Colorado River.

COOPERATION.--Records furnished by Bureau of Reclamation prior to July 21, 1972 and since June 20, 1983.

09530400. RESERVATION DRAIN NO. 11.
LOCATION.--At outlet to Drain 8-B (Araz Drain), in NE¼NE¼ sec.19, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record shows drainage from sec.20, T.16 S., R.22 E. Flow at this station, with that at sta 09530500, is used to determine seepage from All-American Canal.

09530500. DRAIN 8-B.
LOCATION.--Enters Colorado River in SW¼SW¼ sec.19, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian, 4 mi downstream from outlet of Yuma Main Canal wasteway.

PERIOD OF RECORD.--March 1948 to current year (monthly discharge only). Prior to October 1955, published as Araz Drain.

REMARKS.--Record shows seepage from All-American Canal and waste and drainage water west of Yuma Main Canal on the Reservation Division. Flow at this station, with that at sta 09530400, is used to determine seepage from All-American Canal.

Return surface flows below Imperial Dam, AZ-CA--Continued

09531800 MAIN OUTLET DRAIN EXTENSION ABOVE MORELOS DAM (M.O.D.E. 2).

LOCATION.--Water-stage recorder and Parshall flume in NW¼NW¼ sec.36, T.16 S., R.21 E., Hydrologic Unit 15030107, San Bernardino meridian, at outlet to Colorado River, 1.7 mi upstream from Morelos Dam.

PERIOD OF RECORD.--November 1965 to current year (monthly discharge only).

REMARKS.--Record shows water conveyed to Colorado River 1.7 mi above Morelos Dam, from numerous drainage wells in Wellton-Mohawk Irrigation and Drainage District.

09531850. COOPER WASTEWAY.

LOCATION.--Water-stage recorder and weir, in NE¼NE¼ sec.28, T.8 S., R.24 W., Hydrologic Unit 15030108, 0.6 mi upstream from Morelos Dam. Prior to July 14, 1971, at site 1 mi downstream.

PERIOD OF RECORD.--January 1934 to September 1985 (monthly discharge only). Publication by U.S. Geological Survey discontinued; future records available in publications of the International Boundary and Water Commission.

REMARKS.--Record shows waste water from Valley Division returned to Colorado River.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09531900. MAIN OUTLET DRAIN EXTENSION BELOW MORELOS DAM (M.O.D.E. 3).

LOCATION.--Water-stage recorder and Parshall flume in NW¼SE¼ sec.28, T.8 S., R.24 W., Hydrologic Unit 15030108, at outlet to Colorado River just downstream from Morelos Dam.

PERIOD OF RECORD.--November 1965 to September 1985 (monthly discharge only). Publication by U.S. Geological Survey discontinued; future records available in publications of the International Boundary and Water Commission.

REMARKS.--Record shows water conveyed to Colorado River below Morelos Dam, from numerous drainage wells in Wellton-Mohawk Irrigation and Drainage District.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09532500. ELEVEN MILE WASTEWAY.

LOCATION.--Water-stage recorder and regulating gate in SE¼NW¼ sec.8, T.9 S., R.24 W., Hydrologic Unit 15030108, 3.2 mi downstream from Morelos Dam.

PERIOD OF RECORD.--January 1924 to September 1985 (monthly discharge only). Publication by U.S. Geological Survey discontinued; future records available in publications of the International Boundary and Water Commission.

REMARKS.--Record shows waste water from Valley Division returned to Colorado River.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09533000. TWENTY-ONE MILE WASTEWAY.

LOCATION.--Water-stage recorder and weir in NE¼NW¼ sec.35, T.10 S., R.25 W., Hydrologic Unit 15030108, 0.6 mi upstream from outlet to Colorado River, which is 2.4 mi upstream from southerly international boundary and 2.6 mi northwest of San Luis, Ariz.

PERIOD OF RECORD.--March 1939 to September 1985 (monthly discharge only). Publication by U.S. Geological Survey discontinued; future records available in publications of the International Boundary and Water Commission.

REMARKS.--Record shows waste water from Valley Division returned to Colorado River.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09533300. WELLTON-MOHAWK BYPASS DRAIN AT ARIZONA-SONORA BOUNDARY.

LOCATION.--Water-stage recorder and Parshall flume in NW¼NE¼ sec.10, T.11 S., R.25 W., Hydrologic Unit 15030108, on right bank 80 ft upstream from the Arizona boundary, 550 ft east of the thalweg of Colorado River, and 1.8 mi west of San Luis, Ariz.

PERIOD OF RECORD.--June 1977 to September 1985 (monthly discharge only). Publication by U.S. Geological Survey discontinued; future records available in publications of the International Boundary and Water Commission.

REMARKS.--Record shows water conveyed to the Santa Clara Slough, from numerous drainage wells in Wellton-Mohawk Irrigation and Drainage District.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09534000. MAIN DRAIN.

LOCATION.--Flowmeters in discharge pipes at pumping plant in SE¼NE¼ sec.11, T.11 S., R.25 W., Hydrologic Unit 15030108, 0.4 mi west of San Luis, Ariz.

PERIOD OF RECORD.--January 1919 to September 1985 (monthly discharge only). Publication by U.S. Geological Survey discontinued; future records available in publications of the International Boundary and Water Commission.

REMARKS.--Record shows flow, which consists mostly of drainage water from the Valley Division, which is pumped across the Arizona-Sonora boundary for use in Mexico.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

Return surface flows below Imperial Dam, AZ-CA--Continued

09534300. WEST MAIN CANAL WASTEWAY.

LOCATION.--Water-stage recorder and weir, in NW¼NE¼ sec.11, T.11 S., R.25 W., Hydrologic Unit 15030108, 0.3 mi upstream from outlet to Main Drain, and 0.4 mi west of San Luis, Ariz.

PERIOD OF RECORD.--February 1971 to September 1985 (monthly discharge only). Publication by U.S. Geological Survey discontinued; future records available in publications of the International Boundary and Water Commission.

REMARKS.--Record shows waste water from Valley Division which is discharged across the Arizona-Sonora boundary for use in Mexico.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09534500. EAST MAIN CANAL WASTEWAY.

LOCATION.--Water-stage recorder and weir, in NW¼SW¼ sec.12, T.11 S., R.25 W., Hydrologic Unit 15030108, 0.3 mi upstream from outlet to Main Drain, and 0.2 mi west of San Luis, Ariz.

PERIOD OF RECORD.--January 1924 to June 1928, January 1932 to December 1933, April 1935 to September 1985 (monthly discharge only). Publication by U.S. Geological Survey discontinued; future records available in publications of the International Boundary and Water Commission. Calendar year estimates 1934 and 1935, published in WSP 1313.

REMARKS.--Record shows amount of unused water at the extreme end of the Valley Division, which is discharged across the Arizona-Sonora boundary for use in Mexico.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09534550. TWO-FORTY-TWO WELL FIELD LATERAL NEAR SAN LUIS, AZ.

LOCATION.--Water-stage recorder and Parshall flume, in SE¼SE¼NE¼ sec.11, T.11 S., R.25 W., Hydrologic Unit 15030108, 100 ft north of international boundary and 0.3 mi west of San Luis, Ariz.

PERIOD OF RECORD.--October 1978 to September 1985 (monthly discharge only). Publication by U.S. Geological Survey discontinued; future records available in publications of the International Boundary and Water Commission.

REMARKS.--Records show pumped ground water from two-forty-two well field, east of San Luis, Ariz.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

Return surface flows below Imperial Dam, AZ-CA--Continued

MONTHLY RETURN FLOWS, IN ACRE-FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	Mittry Lake Outlet Channel 09527900	Laguna Canal wasteway 09528600	Levee Canal wasteway 09528800	North Gila Drain No. 1 09529000	North Gila Drain No. 3 09529050	Fortuna wasteway 09529100
October	---	0	395	511	0	37
November	---	0	303	380	0	49
December	---	0	303	487	0	37
CAL YR 1984	---	.5	2,060	7,720	0	595
January	---	9.8	402	306	0	49
February	---	1.4	268	401	0	77
March	---	.02	108	480	0	74
April	417	0	155	476	0	72
May	545	1.4	17	532	0	80
June	504	0	279	516	0	139
July	1,220	0	638	616	0	230
August	1,280	0	344	558	0	241
September	1,440	.04	223	532	0	200
WTR YR 1985	---	13	3,440	5,800	0	1,290

Month	North Gila Main Canal wasteway 09529150	South Gila Pump Outlet Channel No. 3 09529160	Bruce Church Drain 09529200	South Gila Pump Outlet Channel No. 2 09529240	Bruce Church wasteway 09529250
October	290	914	36	1,370	211
November	249	966	18	1,330	82
December	68	1,350	18	1,760	267
CAL YR 1984	1,860	14,550	1,050	17,650	1,310
January	106	1,290	60	1,770	344
February	28	1,030	89	1,630	194
March	131	1,050	78	1,680	134
April	331	952	48	1,650	64
May	259	984	61	1,510	103
June	184	446	53	954	231
July	63	1,290	46	1,200	136
August	54	1,140	49	1,110	206
September	158	714	51	799	215
WTR YR 1985	1,920	12,120	607	16,770	2,190

Month	Wellton-Mohawk Main Outlet Drain 09529300	South Gila Pump Outlet Channel No. 1 09529360	South Gila Drain No. 2 09529400	South Gila Terminal wasteway 09529420	South Gila Pump Outlet Channel No. 4 09529440
October	9,680	1,950	0	185	799
November	8,850	1,640	30	89	659
December	9,830	1,390	31	49	553
CAL YR 1984	124,400	22,940	762	750	8,940
January	10,680	877	31	58	553
February	10,360	1,890	28	50	750
March	11,470	2,340	31	53	799
April	11,620	1,980	30	87	774
May	11,930	1,690	31	86	787
June	8,910	2,320	30	56	682
July	8,410	2,110	31	33	799
August	9,200	1,820	31	54	710
September	8,950	1,480	30	139	655
WTR YR 1985	119,900	21,480	331	939	8,520

NOTE.--Yearly totals given above have been computed from total cfs-days and may differ slightly from the summation of monthly total acre-feet on occasion.

Return surface flows below Imperial Dam, AZ-CA--Continued

MONTHLY RETURN FLOWS, IN ACRE-FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	Reservation Drain No. 7 09529600	Reservation Main Drain No. 6 09529700	Reservation Drain No. 2 09529800	Reservation Drain No. 3 09529900	Reservation Main Drain No. 4 09530000	Yuma Mesa Outlet Drain 09530200
October	123	1,480	25	369	4,720	3,070
November	119	1,190	24	238	3,140	2,530
December	123	1,170	18	184	3,150	2,400
CAL YR 1984	1,450	15,520	203	3,670	43,380	22,390
January	123	1,110	18	184	3,720	3,110
February	111	1,200	17	222	2,770	3,200
March	123	1,320	11	214	4,410	3,570
April	119	1,390	16	238	4,410	3,270
May	123	1,480	29	329	3,000	3,350
June	119	1,280	28	444	4,110	1,600
July	123	1,480	37	464	4,190	1,340
August	123	1,570	41	464	3,460	2,060
September	119	1,520	57	504	4,320	1,860
WTR YR 1985	1,450	16,190	321	3,860	45,380	31,370

Month	Reservation Drain No. 11 09530400	Drain 8-B 09530500	M.O.D.E. 2 (above Morelos Dam) 09531800	Cooper wasteway 09531850	M.O.D.E. 3 (below Morelos Dam) 09531900	Eleven Mile wasteway 09532500
October	123	738	197	58	0	58
November	119	714	59	68	0	212
December	123	615	35	42	0	213
CAL YR 1984	939	7,360	1,490	721	370	1,530
January	123	615	158	82	0	53
February	111	555	305	35	0	207
March	123	589	166	53	0	242
April	98	516	88	67	41	77
May	98	651	169	40	29	140
June	109	655	255	42	75	68
July	91	754	163	63	0	20
August	115	785	81	57	2.6	189
September	134	845	52	132	43	91
WTR YR 1985	1,370	8,030	1,730	739	190	1,570

Month	Twenty-one Mile wasteway 09533000	Wellton-Mohawk Bypass Drain 09533300	Main Drain 09534000	West Main Canal wasteway 09534300	East Main Canal Wasteway 09534500	242 Well Field Lateral near San Luis, AZ 09534550
October	38	10,400	9,260	280	410	103
November	5.8	9,720	8,950	342	531	49
December	4.8	10,970	8,120	395	436	48
CAL YR 1984	60	125,200	99,380	3,810	4,090	3,020
January	0	11,690	7,150	273	374	33
February	2.8	11,930	6,680	377	214	1,030
March	.8	12,700	7,820	366	244	42
April	0	13,170	7,730	272	233	26
May	0	13,560	7,880	356	615	55
June	11	9,720	7,860	301	276	48
July	9.9	8,330	8,410	276	353	294
August	3.0	9,540	8,720	295	403	166
September	1.2	8,860	7,730	423	469	153
WTR YR 1985	79	130,600	96,320	3,960	4,560	2,040

NOTE.--Yearly totals given above have been computed from total cfs-day and may differ slightly from the summation of monthly total acre-feet on occasion.

09531700 WELLTON-MOHAWK MAIN OUTLET DRAIN NEAR YUMA, AZ

LOCATION.--Lat 32°43'54", long 114°39'58", in SE¼SE¼ sec.29, T.16 S., R.22 E., San Bernardino Meridian, in Arizona, Yuma County, Hydrologic Unit 15030107, 1.1 west of Joe Henry Memorial Park in Yuma, Arizona.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1982 to September 1985 (discontinued).
WATER TEMPERATURE: October 1982 to September 1985 (discontinued).

INSTRUMENTATION.--Specific conductance and water temperature recorder October 1982 to September 1985.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 6,710 microsiemens on Sept. 14, 1985; minimum, 3,410 microsiemens on July 7, 1984.
WATER TEMPERATURE: Maximum recorded, 31.5°C on July 28, 29, 1985; minimum recorded, 8.0°C on Nov. 10, 1985.

REMARKS.--Recorder removed during period of high water in Colorado River, October thru February, 1983.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 6,710 microsiemens Sept. 14; minimum recorded, 3,540 microsiemens Oct. 16.
WATER TEMPERATURE: Maximum recorded, 31.5°C July 28, 29; minimum recorded, 8.0°C Nov. 10.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	4910	4020	4370	4310	4170	4230	4400	4170	4250	4430	4280	4360
2	4500	3850	4170	4390	3870	4120	4300	4130	4200	4410	4200	4300
3	4410	4000	4170	4280	3780	4010	4260	4130	4200	4410	4300	4360
4	4570	4000	4160	4160	3770	3920	4210	4110	4170	4370	4270	4330
5	4500	4060	4230	4230	3820	3990	4160	3980	4080	4870	4280	4530
6	4520	3930	4210	4130	3830	3960	4230	3970	4100	4820	4400	4580
7	4340	4150	4230	4380	3850	4060	4170	3970	4120	4810	4500	4660
8	4670	4110	4390	4410	3830	4120	4330	4120	4200	4700	4460	4620
9	4760	4270	4500	4170	3690	3840	4270	4110	4190	4660	4320	4450
10	4580	4190	4420	3960	3720	3820	4290	4200	4260	4350	4220	4290
11	4550	4300	4430	3970	3860	3910	4400	4210	4290	4300	4160	4230
12	4580	4310	4420	4180	3850	3960	4730	4310	4460	4150	4020	4070
13	4370	4000	4230	4380	3840	4060	4270	3990	4090	4110	3920	4010
14	4410	3750	4200	4510	3960	4180	4120	3970	4050	4280	4110	4200
15	4380	3720	4160	4460	3880	4120	4280	4060	4170	4320	4140	4230
16	4120	3540	3770	4360	4020	4170	4370	4200	4270	4250	4110	4180
17	4290	3810	4010	4270	3870	4050	4350	4130	4280	4190	4040	4100
18	3820	3660	3730	4110	3860	4000	4240	4090	4150	4220	4060	4100
19	3790	3600	3690	4360	3990	4140	4250	4110	4180	4190	3990	4090
20	4090	3730	3870	4500	3990	4220	4400	4090	4290	4290	4120	4200
21	4310	3790	3980	4350	3900	4120	4310	4190	4250	4300	4150	4230
22	4020	3830	3920	4370	3910	4110	4200	4080	4120	4320	4190	4250
23	3860	3690	3770	4200	4010	4110	4140	4000	4090	4320	4140	4230
24	3910	3660	3770	4110	3900	3990	4460	4120	4310	4380	4190	4280
25	4090	3840	3970	4100	3890	4010	4850	4380	4530	4490	4140	4270
26	4310	3970	4090	4020	3900	3950	4550	4400	4460	4860	4370	4690
27	4530	4070	4240	3970	3850	3900	4410	4240	4350	4390	4160	4250
28	4700	4120	4370	4030	3900	3970	4580	4340	4450	4380	4110	4220
29	4760	4200	4450	4170	3970	4060	4570	4470	4510	4240	4100	4180
30	4620	4040	4330	4280	4020	4150	4490	4350	4430	4100	3940	4010
31	4450	4070	4290	---	---	---	4500	4360	4440	4000	3870	3950
MONTH	4910	3540	4146	4510	3690	4042	4850	3970	4256	4870	3870	4273

09531700 WELLTON-MOHAWK MAIN OUTLET DRAIN NEAR YUMA, AZ--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4030	3790	3900	4550	3980	4250	5110	4480	4700	4270	3760	4080
2	3990	3920	3970	4640	3980	4440	4610	4480	4540	4220	4030	4150
3	4220	3960	4080	4350	3610	4020	5120	4740	4980	4270	---	---
4	4280	4210	4240	4660	4170	4590	5060	4420	4790	---	---	---
5	4200	3930	4100	4670	4250	4490	5000	4540	4830	---	---	---
6	4310	4070	4180	4530	4330	4460	4960	4470	4760	---	---	---
7	4260	4160	4210	4500	4350	4410	4950	4440	4720	---	---	---
8	4410	4120	4240	4510	4160	4350	4990	4570	4810	---	---	---
9	4710	4240	4450	4960	4410	4650	4940	4610	4810	---	---	---
10	4590	4150	4370	5150	4750	4950	4910	4620	4810	---	---	---
11	4460	4050	4240	4980	4540	4800	4930	4480	4740	---	---	---
12	4430	4160	4220	4660	4360	4480	4860	4180	4670	---	---	---
13	4660	4110	4310	4590	4230	4410	4850	4520	4720	---	---	---
14	4560	4120	4340	4650	4280	4480	4820	4610	4720	---	---	---
15	4640	4130	4360	4710	4070	4470	4830	4420	4670	---	---	---
16	4700	4160	4450	4700	4450	4570	4750	4580	4670	---	---	---
17	4640	4130	4460	4810	4360	4580	4680	4180	4470	---	---	---
18	4750	4450	4610	4630	3840	4420	4330	3760	4010	---	---	---
19	4690	4550	4630	4260	3700	3930	4500	3900	4190	---	---	---
20	4620	4010	4370	4540	3810	4210	4420	3870	4180	---	---	---
21	4090	3880	3960	5000	4440	4700	4130	3730	3880	---	---	---
22	4360	4020	4170	4840	4430	4640	4340	3640	3940	---	---	---
23	4470	3990	4210	5050	4440	4710	4500	3880	4220	---	---	---
24	4510	3930	4160	5100	4550	4810	4490	4200	4360	---	---	---
25	4500	3800	4240	5130	4620	4870	4420	4100	4280	---	---	---
26	4380	3920	4230	4940	4330	4690	4100	3620	3860	---	---	---
27	4400	3990	4200	4920	4360	4560	4280	3640	3950	---	---	---
28	4650	3870	4240	4660	4110	4480	4380	3930	4190	---	---	---
29	---	---	---	4460	3810	4150	4330	3720	4050	---	---	---
30	---	---	---	4540	3780	4170	4230	3580	4070	---	---	---
31	---	---	---	4800	3910	4430	---	---	---	---	---	---
MONTH	4750	3790	4255	5150	3610	4489	5120	3580	4453	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	5600	5210	5410	5070	4770	5010	5750	5510	5620
2	4500	---	---	5450	4960	5250	5140	4780	4960	5850	5430	5640
3	4580	---	---	5380	5030	5200	5090	4610	4850	5800	5510	5630
4	4700	4350	4520	5400	5020	5200	5120	4870	5000	5500	5190	5410
5	4910	4520	4710	5310	5010	5180	4860	4530	4710	5380	---	---
6	4970	4700	4830	5220	4640	5080	5010	4660	4840	---	---	---
7	5140	4790	4960	5230	4930	5090	4990	4790	4880	---	---	---
8	5020	4800	4940	5320	4950	5140	5100	4750	4910	---	---	---
9	4980	4750	4880	5370	5130	5230	5090	4790	4960	5690	---	---
10	4950	4710	4850	5380	5080	5250	5110	4790	4950	5560	4590	4950
11	5010	4800	4900	5310	4990	5170	5150	4850	4990	4890	3840	4030
12	5020	4750	4880	5220	4900	5060	5110	4840	4970	4650	3560	3870
13	4960	4710	4850	5290	4920	5110	5060	4820	4930	5780	3770	5110
14	4910	4700	4810	5140	4910	5010	5080	4790	4930	6710	4830	5520
15	4920	4650	4790	4960	4750	4860	5160	4850	5000	5760	4650	5220
16	4950	4650	4810	4930	4690	4810	5300	4970	5130	5690	4310	4960
17	5250	4620	4930	4930	4570	4730	5350	5020	5190	5790	5040	5400
18	5340	5030	5190	4950	4610	4770	5350	5130	5240	5200	3820	4570
19	5510	5040	5270	5170	4720	4930	5540	5150	5340	4150	3900	4030
20	5470	5010	5210	5140	4840	4970	5560	5160	5360	4370	3880	4140
21	5590	5190	5380	5090	4720	4900	5430	5100	5290	5180	4150	4520
22	5400	5090	5280	4900	4610	4780	5420	5150	5300	5340	4490	4850
23	5520	5080	5280	5070	4680	4860	5450	5200	5330	5400	4640	5000
24	5420	5110	5240	5140	4750	4940	5470	5210	5350	5580	4710	5070
25	5460	5060	5250	5020	4730	4870	5450	5300	5380	4980	4640	4800
26	5290	4680	5050	5040	4740	4890	5550	5280	5420	4820	4550	4690
27	5270	4870	5070	5020	4710	4880	5740	5330	5540	4680	4460	4600
28	5280	4940	5120	5050	4710	4870	5660	5430	5550	4700	4480	4580
29	5430	5080	5240	4910	4660	4780	5730	5500	5630	4660	4350	4490
30	5610	5200	5380	4810	4500	4660	5640	5410	5560	4820	4530	4670
31	---	---	---	5180	4560	4920	5690	5350	5550	---	---	---
MONTH	---	---	---	5600	4500	4994	5740	4530	5163	---	---	---

09531700 WELLTON-MOHAWK MAIN OUTLET DRAIN NEAR YUMA, AZ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.5	20.5	22.5	25.0	20.0	22.5	19.5	17.5	18.5	19.5	17.5	18.5
2	23.0	18.5	21.0	25.5	21.5	23.0	19.5	18.0	18.5	18.5	16.5	17.5
3	23.5	20.5	22.5	25.5	20.5	22.5	19.5	18.5	19.0	18.5	17.5	18.0
4	23.5	19.0	22.5	25.5	20.0	22.5	19.5	18.0	19.0	18.5	17.0	18.0
5	24.5	22.0	23.5	25.5	12.0	22.0	19.5	18.5	19.0	19.5	18.0	18.5
6	25.0	23.0	24.0	23.5	13.0	21.0	20.0	18.5	19.0	20.5	18.5	19.5
7	25.0	23.5	24.0	25.5	20.5	23.0	19.5	18.0	19.0	23.0	21.0	22.5
8	25.0	23.5	24.0	22.5	9.0	19.5	23.0	19.0	21.0	23.0	21.0	22.0
9	25.0	23.5	24.0	18.5	9.5	13.5	23.0	19.5	20.5	22.0	19.0	20.5
10	25.0	23.5	24.5	15.0	8.0	13.0	21.0	19.0	19.5	23.0	19.5	21.0
11	25.0	24.0	24.5	16.5	10.5	14.0	23.0	19.0	20.5	21.5	18.5	19.5
12	25.5	23.5	24.5	15.5	10.5	14.0	23.5	19.5	21.5	18.5	17.5	18.0
13	24.5	22.0	24.0	16.0	12.5	14.5	21.5	16.5	18.0	18.5	16.5	17.5
14	25.0	22.0	24.0	15.5	8.5	13.5	18.0	16.0	17.0	22.0	18.5	20.0
15	24.5	21.0	23.5	23.5	10.5	17.0	18.5	17.0	17.5	23.0	19.0	20.5
16	21.5	16.0	18.5	23.0	20.5	21.5	19.0	17.5	18.5	21.0	18.5	19.5
17	23.0	17.0	19.5	22.0	18.5	20.0	20.0	18.5	19.0	22.0	18.0	19.5
18	18.5	16.0	17.0	21.5	18.5	20.0	20.0	18.5	19.0	21.0	18.0	19.5
19	18.5	15.0	16.5	23.0	19.0	21.0	19.5	19.0	19.5	22.0	18.0	19.5
20	21.0	16.5	19.0	22.5	18.5	20.0	21.0	19.5	20.0	22.5	18.5	20.5
21	24.0	17.5	20.5	21.5	18.0	19.0	19.5	18.5	19.0	22.5	19.0	21.0
22	23.5	18.5	21.0	21.5	18.5	19.5	18.5	17.5	18.0	22.5	20.0	21.5
23	21.0	16.5	18.0	21.5	19.5	20.0	18.0	16.5	17.5	22.5	20.0	21.0
24	20.5	16.0	17.5	20.0	18.5	19.0	19.0	17.5	18.0	24.0	20.0	22.0
25	21.5	17.0	19.0	19.5	18.5	19.0	22.0	18.0	19.0	23.0	19.0	21.5
26	24.0	18.0	20.5	18.5	18.0	18.0	20.0	19.0	19.0	23.5	22.5	23.0
27	25.0	18.5	22.0	18.0	16.5	17.5	20.5	19.0	19.5	22.5	19.0	20.0
28	25.5	21.5	23.0	18.5	17.5	18.0	23.0	20.5	21.5	22.0	18.0	19.5
29	26.0	22.0	24.0	19.5	18.0	18.5	22.5	20.0	21.5	22.5	19.5	21.0
30	26.0	22.5	24.0	19.5	18.0	18.5	21.0	19.0	20.0	19.5	18.0	18.5
31	25.5	22.5	24.5	---	---	---	21.0	19.0	20.0	17.5	15.5	16.5
MONTH	26.0	15.0	22.0	25.5	8.0	19.0	23.5	16.0	19.0	24.0	15.5	20.0
		FEBRUARY			MARCH			APRIL			MAY	
1	17.0	14.5	15.5	28.5	25.0	26.5	25.0	20.0	22.5	27.5	25.0	26.0
2	17.0	15.5	16.0	27.5	19.5	24.0	24.5	21.0	22.5	27.0	25.5	26.5
3	18.5	15.5	17.0	20.5	18.0	19.0	26.0	23.0	25.0	27.0	25.0	26.0
4	19.0	18.0	18.5	23.0	19.0	21.5	26.0	22.5	24.5	26.5	24.5	25.5
5	18.5	16.5	17.5	23.0	19.0	21.0	26.0	23.0	24.5	25.5	24.5	25.0
6	19.5	17.0	18.0	22.5	19.0	21.5	26.0	22.5	25.0	26.0	24.0	25.0
7	21.0	18.0	19.0	22.5	20.0	21.5	26.5	21.5	25.0	25.5	24.0	25.0
8	21.0	18.5	20.0	22.0	19.0	20.5	27.0	24.5	25.5	26.5	23.5	25.0
9	23.0	20.5	22.0	25.5	21.0	22.5	27.0	24.5	26.0	26.5	24.5	25.0
10	23.0	19.0	20.5	26.0	24.0	25.0	27.0	25.0	26.0	24.0	18.5	22.5
11	20.0	17.5	18.5	25.0	22.0	23.0	27.0	24.5	26.0	24.5	16.5	21.5
12	21.5	18.5	19.5	24.0	18.5	21.5	27.0	24.5	26.0	25.0	21.0	23.0
13	23.5	19.0	21.0	25.5	20.0	23.0	27.0	25.0	26.0	26.0	23.5	24.5
14	23.5	20.0	22.5	25.5	21.5	24.0	27.0	25.0	26.0	26.0	23.5	24.5
15	25.0	20.0	23.0	26.0	22.5	24.5	27.0	24.5	26.0	25.5	24.0	24.5
16	25.5	20.5	23.0	25.5	22.5	24.5	26.5	24.5	25.5	25.0	23.0	24.0
17	25.5	21.5	23.5	26.0	22.0	24.5	25.5	22.5	24.5	26.0	23.0	24.5
18	25.5	22.5	24.0	26.0	18.5	24.0	22.0	16.5	20.0	26.0	23.0	24.5
19	26.0	23.5	24.5	22.5	17.0	19.0	25.5	20.0	23.0	25.5	22.5	24.5
20	25.0	20.5	23.5	26.0	20.5	23.0	25.0	24.0	24.5	25.5	23.0	24.5
21	21.0	19.0	20.0	26.0	22.5	25.0	24.5	20.5	23.0	26.0	23.0	25.0
22	24.5	20.0	22.0	25.5	21.5	24.0	25.5	21.0	23.0	26.0	24.0	25.0
23	24.5	22.0	23.5	25.5	20.0	23.0	26.5	24.5	25.5	26.0	24.0	25.0
24	26.0	20.5	23.0	25.5	21.5	24.0	26.5	24.5	26.0	26.0	24.0	25.0
25	27.5	22.0	24.5	25.5	21.5	24.0	26.0	23.5	25.0	26.0	24.0	25.0
26	27.5	22.5	25.0	25.0	20.5	23.0	24.0	17.5	21.5	25.5	23.0	24.5
27	27.5	24.0	26.0	24.0	19.0	21.5	25.0	17.5	21.5	25.5	23.0	24.5
28	28.5	24.0	26.0	23.5	17.0	21.0	25.5	23.5	25.0	25.5	23.0	24.5
29	---	---	---	19.0	16.0	17.0	26.5	24.0	25.5	24.5	23.0	24.0
30	---	---	---	21.0	15.5	17.5	26.5	24.5	26.0	25.0	23.0	24.0
31	---	---	---	24.0	16.5	20.0	---	---	---	24.5	23.0	24.0
MONTH	28.5	14.5	21.5	28.5	15.5	22.5	27.0	16.5	24.5	27.5	16.5	24.5

09531700 WELLTON-MOHAWK MAIN OUTLET DRAIN NEAR YUMA, AZ-Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.0	22.5	24.0	28.5	26.0	27.5	31.0	27.5	29.0	29.0	27.0	28.0
2	25.0	23.5	24.0	28.5	26.5	27.5	31.0	27.5	29.5	29.0	27.0	28.0
3	24.0	22.0	23.5	29.0	25.5	27.0	31.0	28.0	29.5	27.5	24.5	26.0
4	25.0	23.0	24.0	29.0	26.5	28.0	29.5	27.5	29.0	25.0	23.0	24.0
5	26.0	23.0	24.5	29.0	26.5	28.0	29.5	27.0	28.5	26.0	23.0	24.5
6	26.5	24.0	25.5	28.5	27.0	28.0	30.5	27.0	28.5	25.0	24.0	24.5
7	27.5	25.0	26.0	29.0	27.0	28.0	30.0	28.5	29.0	27.0	23.5	25.5
8	27.0	25.0	26.5	29.0	27.0	28.0	30.0	27.5	28.5	28.0	25.5	26.5
9	27.0	25.0	26.0	29.5	27.0	28.0	29.5	27.0	28.5	27.0	25.0	26.0
10	27.0	24.5	26.0	29.0	27.0	28.5	29.5	27.0	28.5	26.5	24.0	25.0
11	27.5	25.5	26.5	29.0	26.5	28.0	30.0	27.0	28.5	24.5	23.0	23.5
12	27.5	25.5	26.5	29.0	27.0	28.0	29.5	27.0	28.0	25.0	20.0	23.5
13	27.5	25.5	26.5	29.5	26.5	28.0	29.0	26.5	28.0	26.0	22.0	24.5
14	27.5	25.0	26.5	28.5	26.5	27.5	28.0	25.5	27.0	26.0	23.5	24.5
15	27.5	25.0	26.5	28.5	26.5	27.5	28.5	25.5	27.0	26.5	24.0	25.0
16	27.5	25.5	26.5	28.5	27.0	28.0	29.5	26.5	28.0	26.5	24.0	25.0
17	28.0	25.0	27.0	28.5	26.0	27.5	29.0	26.5	28.0	26.0	24.0	25.0
18	28.5	26.0	27.0	29.0	26.5	28.0	30.0	27.0	28.5	24.5	23.5	24.0
19	28.5	26.0	27.5	30.5	27.0	28.5	30.0	27.5	29.0	24.5	21.0	23.5
20	29.0	26.5	28.0	30.5	27.5	29.0	31.0	27.5	29.0	25.5	21.5	24.0
21	28.5	26.0	27.5	30.5	28.0	29.0	31.0	28.0	29.5	26.5	24.0	25.5
22	28.5	25.5	27.0	30.0	27.5	28.5	30.0	27.5	29.0	26.5	24.5	25.5
23	28.5	26.0	27.0	30.5	27.5	29.0	29.5	27.5	29.0	26.0	24.5	25.5
24	27.5	25.5	27.0	30.0	27.0	29.0	29.5	27.0	28.0	26.5	24.5	25.5
25	27.0	24.5	26.0	30.0	27.0	28.5	28.5	26.5	27.5	27.0	24.5	26.0
26	28.0	25.0	26.5	30.0	27.0	28.5	30.0	26.5	28.0	26.5	25.0	26.0
27	28.0	25.0	26.5	30.5	28.0	29.5	30.5	27.5	29.0	26.0	25.0	25.5
28	28.5	26.0	27.0	31.5	28.5	30.0	30.0	28.0	29.0	26.5	24.0	25.0
29	28.5	26.0	27.5	31.5	29.0	30.5	30.0	27.5	29.0	26.0	23.5	24.5
30	29.0	26.0	27.5	31.0	29.0	30.0	29.5	27.5	28.5	26.5	25.0	26.0
31	---	---	---	31.0	28.0	29.5	29.0	26.5	27.5	---	---	---
MONTH	29.0	22.0	26.5	31.5	25.5	28.5	31.0	25.5	28.5	29.0	20.0	25.0
YEAR	31.5	8.0	23.5									

SAN SIMON WASH BASIN

09535100 SAN SIMON WASH NEAR PISINIMO, AZ

LOCATION.--Lat 32°02'39", long 112°22'13", in SE¼ sec.9, T.16 S., R.1 W. (unsurveyed), Pima County, Hydrologic Unit 15080101, in Papago Indian Reservation, on the right bank about 100 ft downstream from road, just upstream from Gu Vo Wash, and 3.2 mi west of Pisinimo.

DRAINAGE AREA.--569 mi^2.

PERIOD OF RECORD.--February 1972 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,830 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 18-19. Records fair.

AVERAGE DISCHARGE.--13 years, 4.07 ft^3/s, 2,950 acre-ft/yr; median of yearly mean discharges, 2.6 ft^3/s, 1,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft^3/s Sept. 24, 1976, gage height, 10.82 ft, from rating curve extended above 1,700 ft^3/s on basis of slope-area measurement of peak flow; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 19	0415	*790	*6.83

No flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	6.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.01	.00	.00	.00	.22	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.23	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	25	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	20	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.1	.00	.54
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	165	3.0	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.2	.04	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.5	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.58	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.0
27	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.27
28	.00	.00	.43	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.01	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.10	---
TOTAL	6.61	.00	25.48	.00	.45	.00	.00	.00	.00	192.41	3.14	3.84
MEAN	.21	.00	.82	.00	.02	.00	.00	.00	.00	6.21	.10	.13
MAX	6.6	.00	25	.00	.23	.00	.00	.00	.00	165	3.0	3.0
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	13	.00	51	.00	.90	.00	.00	.00	.00	382	6.2	7.6

CAL YR 1984 TOTAL 3272.59 MEAN 8.94 MAX 2360 MIN .00 AC-FT 6490
WTR YR 1985 TOTAL 231.93 MEAN .635 MAX 165 MIN .00 AC-FT 460

SAN SIMON WASH BASIN

09535300 VAMORI WASH AT KOM VO, AZ

LOCATION.--Lat 31°57'04", long 112°20'50", in NW¼ sec.14, T.17 S., R.1 W (unsurveyed), Pima County, Hydrologic Unit 15080101, in Papago Indian Reservation, on right bank 200 ft downstream from road crossing, 0.6 mi south of Kom Vo (Santa Cruz Village) and 5 mi upstream from mouth.

DRAINAGE AREA.--1,250 mi^2, approximately, of which about 250 mi^2 is in Mexico.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1972 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,770 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 26 to June 11, July 29 to Aug. 1. Records good above 25 ft^3/s and poor below.

AVERAGE DISCHARGE.--13 years, 12.1 ft^3/s, 8,770 acre-ft/yr; median of yearly mean discharges, 8.8 ft^3/s, 6,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s Oct. 3, 1983, gage height, 10.54 ft, from rating curve extended above 550 ft^3/s on basis of slope-area measurement of peak flow; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 19	1130	*630	*8.49

No flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00	23
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.50
3	2.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00	.00
5	5.7	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00
6	.98	.00	.00	.00	2.1	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.19	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	8.2	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	5.6	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	57	.00	30
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	229	13	55
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	133	5.3	71
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	44	.00	6.4
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	.00	.92
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.9	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.0	.00	.00
28	.00	.00	26	.00	.00	.00	.00	.00	.00	1.0	.00	.00
29	.00	.00	121	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	53	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	6.0	.00	---	.00	---	.00	---	.00	4.3	---
TOTAL	8.68	.00	219.80	.15	2.50	.00	.00	.00	.00	515.90	22.60	186.82
MEAN	.28	.000	7.09	.005	.089	.000	.000	.000	.000	16.6	.73	6.23
MAX	5.7	.00	121	.15	2.1	.00	.00	.00	.00	229	13	71
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	17	.00	436	.3	5.0	.00	.00	.00	.00	1020	45	371

CAL YR 1984 TOTAL 4668.85 MEAN 12.8 MAX 680 MIN .00 AC-FT 9260
WTR YR 1985 TOTAL 956.45 MEAN 2.62 MAX 229 MIN .00 AC-FT 1900

RIO SONOYTA BASIN

SAN SIMON WASH BASIN

09535300 VAMORI WASH AT KOM VO, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1978 to current year.

INSTRUMENTATION.--Automatic pumping sampler October 1980 to September 1981.

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
SEP 1985												
19...	1215	0.4	180	8.23	26.0	--	712	6.9	91	--	--	--
19...	1615	81	189	7.92	21.5	230	711	6.2	75	20000	66	12

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
SEP 1985												
19...	--	--	--	--	--	67	0	56	--	--	--	--
19...	21	3.3	7.6	0.4	10	67	0	54	6.9	4.2	0.4	11

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
SEP 1985											
19...	--	--	--	0.81	0.10	1.0	0.85	0.29	0.20	0.61	--
19...	132	99	0.18	3.30	0.13	3.7	2.30	0.36	0.26	0.8	80

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
SEP 1985											
19...	--	--	--	--	--	--	--	--	--	--	--
19...	4	54	<0.5	<1	<1	<3	16	74	1	12	2

DATE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
SEP 1985											
19...	--	--	--	--	--	--	--	--	97	274	0.3
19...	<0.1	<10	3	<1	<1	250	9	14	80	2350	514

< Actual value is known to be less than value shown.

09535900 QUITOBAQUITO SPRING NEAR LUKEVILLE, AZ

LOCATION.--Lat 31°56'37", long 113°01'10", in SE¼, sec.18, T.17 S., R.7 W. (unsurveyed), Pima County, Hydrologic Unit 15080102, in Organ Pipe Cactus National Monument, in spring outlet channel 50 ft downstream from first source, 500 ft downstream from second source, and 12.8 mi northwest of Lukeville.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1917 (one discharge measurement, published in WSP 499), October 1981 to current year. Gage-heights and discharge measurements collected at this site, January 1974 to May 1976, are in the files of the National Park Service.

GAGE.--Water-stage recorder and V-notch weir. Elevation of gage is 1,080 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Aug. 28 to Sept. 17. Records good. Record is for flow from the two principal spring openings. Numerous small spring openings in the area discharge downstream from the gage.

COOPERATION.--Channel upstream is maintained by National Park Service to prevent flow from bypassing gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 0.33 ft^3/s Sept. 29, 1983, gage height, 1.51 ft, includes local runoff; minimum, 0.02 ft^3/s Aug. 18, 1983, gage height, 1.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.11 ft^3/s July 18, 1900 hours, gage height, 1.38 ft, includes local runoff; minimum, 0.06 ft^3/s May 3-10, gage height, 1.33 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.07	.07	.08	.08	.09	.08	.07	.06	.07	.08	.07
2	.08	.07	.07	.08	.08	.09	.08	.06	.06	.07	.08	.07
3	.08	.07	.07	.08	.08	.09	.07	.06	.06	.07	.08	.07
4	.08	.07	.07	.08	.08	.09	.07	.06	.06	.07	.08	.07
5	.08	.07	.07	.08	.09	.09	.07	.06	.06	.07	.08	.07
6	.08	.07	.07	.08	.09	.08	.07	.06	.06	.07	.08	.07
7	.07	.07	.07	.08	.09	.08	.07	.06	.06	.07	.08	.07
8	.07	.07	.07	.08	.09	.08	.07	.06	.06	.07	.08	.07
9	.07	.07	.07	.08	.09	.08	.07	.06	.06	.07	.08	.07
10	.07	.07	.08	.08	.09	.08	.07	.06	.06	.07	.08	.07
11	.07	.07	.08	.08	.08	.08	.07	.06	.07	.07	.08	.07
12	.07	.07	.08	.08	.08	.08	.07	.06	.06	.07	.08	.07
13	.07	.07	.08	.08	.08	.08	.07	.07	.06	.07	.08	.07
14	.07	.07	.08	.08	.08	.08	.07	.07	.07	.07	.08	.06
15	.07	.07	.08	.08	.08	.08	.07	.07	.07	.07	.08	.06
16	.07	.07	.08	.08	.08	.08	.07	.07	.07	.07	.08	.06
17	.07	.07	.08	.08	.08	.08	.07	.07	.07	.07	.08	.06
18	.07	.07	.08	.08	.08	.08	.07	.07	.07	.07	.08	.06
19	.07	.06	.07	.08	.08	.08	.07	.07	.07	.07	.08	.06
20	.07	.06	.07	.08	.08	.08	.07	.07	.07	.07	.08	.06
21	.07	.06	.07	.08	.08	.08	.07	.07	.07	.07	.08	.06
22	.07	.07	.07	.08	.09	.08	.07	.07	.07	.07	.08	.06
23	.07	.07	.07	.08	.09	.08	.07	.07	.07	.07	.07	.06
24	.07	.07	.07	.08	.09	.08	.07	.07	.07	.07	.07	.06
25	.07	.07	.07	.08	.09	.08	.07	.07	.07	.07	.07	.06
26	.07	.07	.07	.08	.09	.08	.07	.07	.07	.08	.07	.06
27	.07	.07	.07	.08	.09	.08	.07	.07	.07	.08	.07	.06
28	.07	.07	.07	.08	.09	.08	.07	.07	.07	.08	.07	.06
29	.07	.07	.07	.08	---	.08	.07	.06	.07	.08	.07	.06
30	.07	.07	.07	.08	---	.08	.07	.06	.07	.08	.07	.06
31	.07	---	.07	.08	---	.08	---	.06	---	.08	.07	---
TOTAL	2.23	2.07	2.26	2.48	2.37	2.53	2.12	2.03	1.98	2.23	2.39	1.93
MEAN	.072	.069	.073	.080	.085	.082	.071	.065	.066	.072	.077	.064
MAX	.08	.07	.08	.08	.09	.09	.08	.07	.07	.08	.08	.07
MIN	.07	.06	.07	.08	.08	.08	.07	.06	.06	.07	.07	.06
AC-FT	4.4	4.1	4.5	4.9	4.7	5.0	4.2	4.0	3.9	4.4	4.7	3.8

CAL YR 1984 TOTAL 28.46 MEAN .078 MAX .10 MIN .06 AC-FT 56
WTR YR 1985 TOTAL 26.62 MEAN .073 MAX .09 MIN .06 AC-FT 53

SULPHUR SPRING VALLEY

WHITEWATER DRAW BASIN

09537200 LESLIE CREEK NEAR McNEAL, AZ

LOCATION.--Lat 31°35'24", long 109°30'30", in SE¼NE¼ sec.20, T.21 S., R.28 E., Cochise County, Hydrologic Unit 15080301, on right bank 10 mi east of McNeal.

DRAINAGE AREA.--79.1 mi^2.

PERIOD OF RECORD.--October 1969 to September 1977, July 1982 to current year.

GAGE.--Water-stage recorder and concrete control with shallow sharp-crested V-notch weir. Elevation of gage is 4,620 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--11 years (water years 1970-77, 1983-85), 1.38 ft^3/s, 1,000 acre-ft/yr; median of yearly mean discharges, 0920 ft^3/s, 670 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,600 ft^3/s July 21, 1984, gage height, 8.54 ft, from rating curve extended above 12 ft^3/s on basis of slope-area measurements at gage height 7.33 ft and 8.54 ft; of peak flow; no flow for many days in 1976 and 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, October 1977 to July 1982, 468 ft^3/s, date unknown, gage height, 4.76 ft in gage well.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*), from rating curve extended above 12 ft^3/s as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1930	*709	*4.98
Jan. 27	0100	100	4.18

Minimum daily, 0.81 ft^3/s Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.5	1.5	1.3	1.3	1.3	1.3	1.2	1.2	1.0	1.1	.88
2	1.5	1.6	1.5	1.2	1.3	1.3	1.3	1.2	1.3	1.0	1.1	.87
3	90	1.6	1.5	1.2	1.3	1.3	1.3	1.3	1.3	1.1	1.1	.89
4	9.8	1.6	1.5	1.2	1.3	1.3	1.3	1.3	1.3	1.1	1.1	.87
5	2.1	1.6	1.4	1.2	1.3	1.3	1.3	1.3	1.3	1.1	1.1	.86
6	1.9	1.6	1.4	1.2	1.3	1.3	1.3	1.3	1.4	1.1	1.1	.86
7	1.9	1.6	1.4	1.2	1.3	1.3	1.3	1.3	1.4	1.1	1.1	.85
8	1.8	1.6	1.4	1.2	1.3	1.3	1.4	1.3	1.4	1.0	1.1	.83
9	1.8	1.7	1.4	1.2	1.3	1.3	1.5	1.2	1.4	1.1	1.1	.82
10	1.8	1.7	1.4	1.2	1.3	1.3	1.5	1.2	1.4	1.1	1.1	.84
11	1.9	1.7	1.5	1.2	1.3	1.2	1.5	1.3	1.2	1.0	1.2	1.0
12	1.8	1.7	1.4	1.2	1.3	1.3	1.5	1.2	1.2	1.0	1.1	.92
13	1.8	1.7	1.5	1.1	1.3	1.3	1.5	1.2	1.2	1.0	1.0	.89
14	1.8	1.7	1.4	1.1	1.3	1.2	1.4	1.3	1.1	.98	.99	.86
15	1.8	1.7	1.3	1.1	1.3	1.3	1.4	1.3	1.1	1.0	.98	.87
16	1.8	1.7	1.2	1.1	1.3	1.3	1.4	1.3	1.1	1.1	.97	.85
17	1.8	1.8	1.2	1.1	1.3	1.3	1.4	1.3	1.1	1.2	.98	.84
18	1.8	1.7	1.2	1.0	1.3	1.3	1.5	1.3	1.1	1.2	.00	1.2
19	1.9	1.7	1.3	1.1	1.3	1.2	1.4	1.3	1.1	1.5	1.1	.98
20	1.9	1.7	1.3	1.1	1.3	1.2	1.4	1.3	1.1	1.5	.98	.94
21	1.9	1.7	1.3	1.1	1.3	1.2	1.4	1.3	1.1	1.2	.94	.92
22	1.9	1.7	1.3	1.1	1.3	1.2	1.4	1.2	1.1	1.2	.94	.89
23	1.9	1.7	1.3	1.1	1.3	1.2	1.4	1.4	1.0	1.1	.92	.85
24	1.7	1.7	1.3	1.2	1.3	1.3	1.4	1.4	1.0	1.1	.91	.83
25	1.5	1.7	1.2	1.2	1.3	1.3	1.4	1.4	1.0	1.0	.91	.81
26	1.5	1.6	1.2	2.1	1.3	1.3	1.3	1.4	1.0	1.0	.92	.81
27	1.5	1.6	1.2	27	1.3	1.3	1.5	1.3	1.0	1.1	.93	.82
28	1.5	1.6	9.7	2.3	1.4	1.3	1.3	1.3	1.0	1.1	.90	2.4
29	1.5	1.6	1.6	1.4	---	1.3	1.3	1.2	1.0	1.1	.90	1.9
30	1.5	1.5	1.4	1.3	---	1.3	1.3	1.2	1.1	1.1	.89	1.0
31	1.5	---	1.3	1.3	---	1.3	---	1.3	---	1.1	.87	---
TOTAL	150.3	49.6	50.5	64.3	36.5	39.6	41.6	39.8	35.0	34.28	31.33	29.15
MEAN	4.85	1.65	1.63	2.07	1.30	1.28	1.39	1.28	1.17	1.11	1.01	.97
MAX	90	1.8	9.7	27	1.4	1.3	1.5	1.4	1.4	1.5	1.2	2.4
MIN	1.5	1.5	1.2	1.0	1.3	1.2	1.3	1.2	1.0	.98	.87	.81
AC-FT	298	98	100	128	72	79	83	79	69	68	62	58

CAL YR 1984 TOTAL 1619.06 MEAN 4.42 MAX 477 MIN .93 AC-FT 3210
WTR YR 1985 TOTAL 601.96 MEAN 1.65 MAX 90 MIN .81 AC-FT 1190

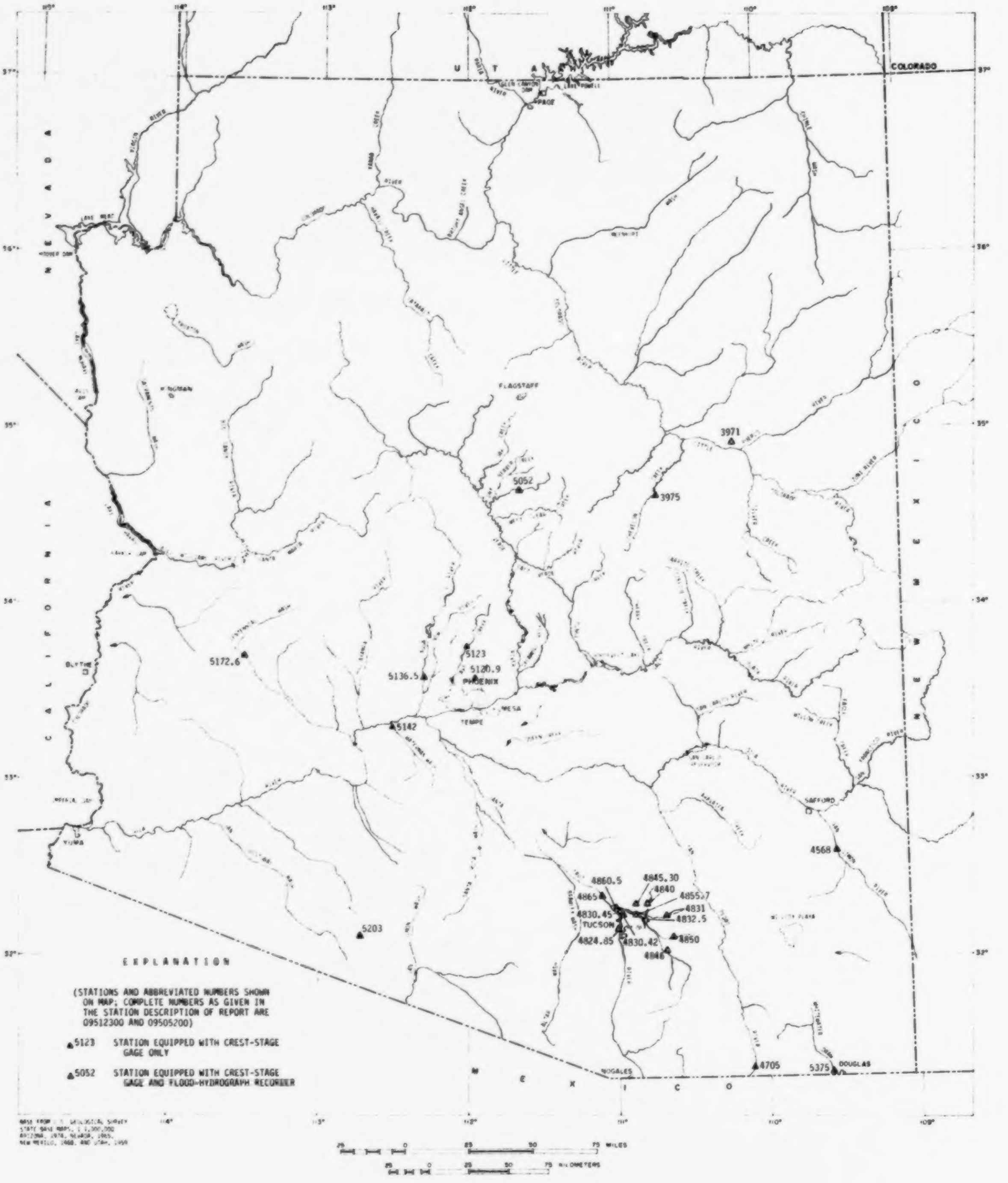

UTAH
COLORADO
NEVADA
CALIFORNIA
NEW MEXICO
MEXICO
GLEN CANYON DAM
LAKE POWELL
PAGE
LAKE MEAD
HOOVER DAM
KINGMAN
FLAGSTAFF
BLYTHE
PHOENIX
MESA
TEMPE
YUMA
SAFFORD
TUCSON
NOGALES
DOUGLAS
3971
3975
5052
5123
5120.9
5136.5
5172.6
5142
5203
4568
4860.5
4845.30
4840
4855.7
4865
4831
4830.45
4832.5
4824.85
4830.42
4850
4848
4705
5375
37°
36°
35°
34°
33°
32°
114°
113°
112°
111°
110°
109°
EXPLANATION
(STATIONS AND ABBREVIATED NUMBERS SHOWN ON MAP; COMPLETE NUMBERS AS GIVEN IN THE STATION DESCRIPTION OF REPORT ARE 09512300 AND 09505200)
5123 STATION EQUIPPED WITH CREST-STAGE GAGE ONLY
5052 STATION EQUIPPED WITH CREST-STAGE GAGE AND FLOOD-HYDROGRAPH RECORDER
25 0 25 50 75 MILES
25 0 25 50 75 KILOMETERS

Figure 7.--Map of Arizona showing location of partial-record gaging stations.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Crest-stage partial-record stations

The following table contains annual maximum discharges of independent peaks at crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1985

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Little Colorado River basin					
09397100	Leroux Wash near Holbrook, AZ	Lat 34°54'18", long 110°12'03", SE¼NE¼NE¼ sec.3, T.17 N., R.20 E., Navajo County, near center of bridge in east-bound lane of Interstate Highway 40, 0.5 mi upstream from mouth and 2.5 mi west of Holbrook.	809	1980-85	4-29-85	10.52	5,000
09397500	Chevelon Creek below Wildcat Canyon near Winslow, AZ	Lat 34°38'11", long 110°42'49", in SW¼ sec.36, T.15 N., R.15 E., Navajo County, Sitgreaves National Forest, on right bank 0.4 mi downstream from Wildcat Canyon and 25 mi south of Winslow.	275	1947-70*, 1982-85	12-28-84	10.37	5,250
		Gila River basin					
09456800	San Simon River at Tanque, AZ	Lat 32°36'30", long 109°32'00", in NW¼SE¼ sec.36, T.9 S., R.27 E., Graham County, on left bank 0.1 mi east of Tanque and 15 mi southeast of Solomon.	1,953	1957-59*, 1981-85	8- 9-85	5.04	771
09470500	San Pedro River at Palominas, AZ	Lat 31°22'48", long 110°06'38", in SW¼SE¼ sec.33, T.23 S., R.22 E., Cochise County, near left bank on downstream side of pier of bridge on State Highway 92, 0.7 mi east of Palominas, 2.5 mi upstream from Green Brush Draw, 4.5 mi downstream from international boundary, and 12 mi southwest of Bisbee.	a741	1930-33*, 1935-41*, 1950-81*, 1982-85	12-28-84	14.14	10,600
09482485	Cholla Wash at Tucson, AZ	Lat 32°12'00", long 110°59'45", in SE¼SE¼NE¼ sec.22, T.14 S., R.13 E., Pima County, 30 ft upstream from culvert on Mission Road, at the northwest corner of the intersection of Mission Road and Silverlake Road.	1.27	1982-85	10- 3-84	b1.15	275
09483042	Cemetery Wash at Tucson, AZ	Lat 32°15'50", long 110°58'42", in NE¼NE¼ sec.35, T.13 S., R.13 E., Pima County, 270 ft west of U.S. Highway 89, 300 ft south of projection of Ft. Lowell Road in Tucson.	1.17	1966-85	---	c2.12	172
09483045	Flowing Wells Wash at Tucson, AZ	Lat 32°15'55", long 110°59'40", in SW¼SW¼ sec.26, T.13 S., R.13 E., Pima County, at intersection of Ft. Lowell Road and Flowing Wells Road in Tucson city limits.	3.53	1971-85	---	c3.96	356

See footnotes at end of the table.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Gila River basin--Continued					
09483100	Tanque Verde Creek near Tucson, AZ	Lat 32°14'48", long 110°40'46", in NE¼NW¼ sec.2, T.14 S., R.16 E., Pima County, 4.4 mi east of Tanque Verde School, 7.4 mi upstream from Agua Caliente Wash, and 17.5 mi east of Tucson city hall.	43.0	1959-74*, 1975-85	12-28-84	7.14	7,880
09483250	Rob Wash at Tucson, AZ	Lat 32°14'08", long 110°48'58", in NE¼NW¼ sec.9, T.14 S., R.15 E., Pima County, at Speedway Blvd., 0.4 mi east of Pantano Road, and 1 mi north of East Broadway in Tucson city limits.	2.08	1971-85	----	d1.47	55
09484000	Sabino Creek near Tucson, AZ	Lat 32°19'00", long 110°48'35", in SE¼NE¼ sec.9, T.13 S., R.15 E., Pima County, 0.5 mi north of Coronado National Forest boundary, and 12 mi northeast of Tucson city hall.	35.5	1932-74*, 1975-85	12-27-84	3.92	2,350
09484530	Craycroft Wash Tributary near Tucson, AZ	Lat 32°18'05", long 110°52'13", in NW¼ sec.13, T.13 S., R.14 E., Pima County, at Paseo Arenal, 0.4 mi south of Sunrise Drive and 0.25 mi east of Craycroft Road.	0.038	1982-85	9-18-85	.85	4.7
09484600	Pantano Wash near Vail, AZ	Lat 32°02'09", long 110°40'37", in SW¼SE¼ sec.14, T.16 S., R.16 E., Pima County, 60 ft upstream from dam, 2.2 mi southeast of Vail, and 20 mi southeast of Tucson city hall.	457	1959-74*, 1975-85	8-20-85	4.94	363
09485000	Rincon Creek near Tucson, AZ	Lat 32°07'46", long 110°37'32", in NW¼NE¼ sec.17, T.15 S., R.17 E., Pima County, 9 mi upstream from mouth, and 22 mi southeast of Tucson city hall.	44.8	1952-74*, 1975-85	1-26-85	4.93	647
09485570	Alamo Wash at Tucson, AZ	Lat 32°15'34", long 110°53'02", in SE¼SE¼NW¼ sec.35 T.13 S., R.14 E., Pima County, 600 ft downstream from Glenn Street, 0.5 mi east of the intersection of Glenn Street and Swan Road.	9.56	1979-85	8-27-85	5.8	705
09486050	Roller Coaster Wash near Tucson, AZ	Lat 32°18'09", long 111°00'12", in SE¼SE¼NW¼ sec.15, T.13 S., R.13 E., Pima County, at Oracle-Jaynes Road, 0.3 mi upstream from the mouth and 1.4 mi north of Tucson city limits.	1.75	1982-85	9-28-85	2.50	75
09486500	Santa Cruz River at Cortero, AZ	Lat 32°21'04", long 111°05'38", in NW¼NW¼ sec.35, T.12 S., R.12 E., Pima County, on right bank at county road, 0.5 mi southwest of Cortero, 2.6 mi downstream from Canada del Oro, and 3.7 mi downstream from Rillito Creek.	e3,503	1947-84*, 1985	12-28-84	6.9	13,000
09505200	Wet Beaver Creek near Rimrock, AZ	Lat 34°40'29", long 111°40'17", in NW¼SW¼ sec.24, T.15 N., R.6 E., Yavapai County, in Coconino National Forest, on right bank 4.5 mi northeast of Rimrock and 5.7 mi upstream from Red Tank Draw.	111	1961-82*, 1983-85	12-27-84	10.20	3,960
09512090	Indian Bend Wash at Shea Boulevard at Phoenix, AZ	Lat 33°35'05", long 111°58'10", in SW¼SW¼SE¼ sec.20, T.3 N., R.4 E., Maricopa County, on left bank 500 ft upstream from Shea Boulevard bridge.	41.2	1984-85	----	----	f
09512300	Cave Creek near Cave Creek, AZ	Lat 33°47'10", long 112°04'00", in SW¼ sec.12, T.5 N., R.3 E., Maricopa County, on left bank 200 ft upstream from Prescott to Mesa transmission line, 4.8 mi southwest of town of Cave Creek, and 5.0 mi upstream from Cave Creek Dam.	121	1958-67*, 1968-79, 1981-85	12-27-84	3.45	910
09513650	Agua Fria River at El Mirage, AZ	Lat 33°36'24", long 112°18'14", in NW¼NW¼ sec.18, T.3 N., R.1 E., Maricopa County, at Grand Avenue, 0.75 mi southeast of El Mirage.	e1,637	1963-79, 1981-85	9-18-85	4.06	621
09514200	Waterman Wash near Buckeye, AZ	Lat 33°19'49", long 112°30'33", in SW¼NE¼ sec.24, T.1 S., R.3 W., Maricopa County, 2.4 mi above mouth, 5.2 mi southeast of Buckeye.	403	1964-85	12-28-84	4.51	950

See footnotes at end of the table.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
Gila River basin--Continued							
09517260	Centennial Wash at Narrows Dam near Salome, AZ	Lat 33°43'29", long 113°30'46", in SW¼SE¼ sec.33, T.5 N., R.12 W., La Paz County, on left bank end of Narrows Dam, 7.4 mi southeast of Salome.	684	1982-85	12- 9-84	10.16	121
09520300	Alamo Wash tributary near Ajo, AZ	Lat 32°06'00", long 112°46'15", in SW¼ sec.22, T.15 S., R.5 W. (unsurveyed), Pima County, at State Highway 85, 20 mi southeast of Ajo.	.90	1963-75, 1978, 1980, 1982-85	----	----	0
Whitewater Draw basin							
09537500	Whitewater Draw near Douglas, AZ	Lat 31°21'08", long 109°35'04", in SW¼SE¼ sec.10, T.24 S., R.27 E., Cochise County, on downstream side of pier of bridge on U.S. Highway 80, 1.5 mi upstream from international boundary and 2 mi west of Douglas.	1,023	1947-82*, [g]1983-85	9-29-85	10.13	1,420

* Operated as a continuous-record gaging station.
a Includes an area of 649 mi^2 in Mexico.
b Gage not in operation from Nov. 5, 1984 to May 22, 1985.
c Peak occurred between Dec. 18, 1984 and May 9, 1985.
d Peak occurred between Oct. 19, 1984 and Dec. 13, 1984.
e Includes an area of 395 mi^2 in Mexico.
f No peaks recorded during year.
g Record furnished by International Boundary and Water Commission.

Discharge measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by one asterisk (*); measurements of peak flow by two asterisks (**).

Discharge measurements made at miscellaneous sites during water year 1985

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		San Juan River basin				
Laguna Creek	Chinle Wash	Lat 36°44'57", long 110°08'08", unsurveyed, Navajo County, about 7 mi east of Kayenta.	229	1982-84	12- 7-84	1.56
		Little Colorado River basin				
Lyman Canal (09385000)	Little Colorado River	Lat 34°22'05", long 109°22'55", in SW¼NE¼ sec.9, T.11 N., R.28 E., Apache County, at former gaging station, 45 ft downstream from outlet tunnel in Lyman Dam, and 9.5 mi south of St. Johns.	---	1950-54* 1955-80*	5-15-85 7-11-85 9- 4-85	41.2 34.0 42.0
Little Colorado River (09385500)	Colorado River	Lat 34°22'05", long 109°22'56", in NW¼SW¼NE¼, sec.9, T.11 N., R.28 E., Apache County, at former gaging station, 65 ft downstream from the outlet tunnel in Lyman Dam, and 9.5 mi south of St. Johns.	790	1941-54* 1955-84*	2-15-85 3-14-85 4-23-85 7-12-85 9- 4-85	0.26 16.0 3.08 5.77 5.77
Little Colorado River (09385700)	Colorado River	Lat 34°27'02", long 109°21'42", in NE¼SW¼SE¼ sec.10, T.12 N., R.28 E., Apache County, 1.2 mi downstream from Salado Spring, 2.2 mi upstream from irrigation district diversion dam, and 4.2 mi upstream from State Highway 61 bridge in St. Johns.	845	1940-41, 1975-84	3-13-85 4-23-85 4-24-85 5-14-85 5-17-85 7-11-85 7-31-85 8-15-85 9- 5-85	8.82 77.4 64.0 38.6 12.5 12.9 14.4 12.2 12.0
		Gila River basin				
Rillito Creek	Santa Cruz River	Lat 32°16'08", long 110°52'28", in NW¼SW¼ sec.25, T.13 S., R.14 E., Pima County, at bridge on Craycroft Road, 0.35 mi south of River Road, in Tucson.	---	----	2-14-85	207
Salt River	Gila River	Lat 33°27'15", long 111°51'24", in sec.5, T.1 N., R.5 E., Maricopa County, at Alma School Road bridge in Mesa.		1983	1- 2-85 1- 3-85 4-18-85	13,600 3,650 35
Salt River	Gila River	Lat 33°24'56", long 112°01'45", in sec.22, T.1 N., R.3 E., Maricopa County, at 24th Street bridge in Phoenix.	13,263	1983-84	12-28-84 1- 2-85 1- 3-85 3-25-85 4-17-85 4-30-85	22,500 14,400 4,520 2,060 234 2,050

* Operated as a continuous-record station.

LITTLE COLORADO RIVER BASIN

342453109241001 LITTLE COLORADO RIVER ABOVE SALADO SPRINGS NEAR ST. JOHNS, AZ

WATER QUALITY DATA

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
APR 1985												
24...	1330	50	515	8.10	24.5	13.5	--	--	--	160	20	41

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
APR 1985											
24...	15	42	1	3.0	176	144	56	26	0.4	19	--

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
APR 1985											
24...	290	0.39	--	<0.10	--	--	--	--	--	--	0.04

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)
APR 1985											
24...	0.12	--	--	--	--	--	--	60	--	--	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)
APR 1985											
24...	--	--	--	12	--	--	--	--	18	--	--

DATE	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CYANIDE DISSOLVED (MG/L AS CN) (00723)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
APR 1985											
24...	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LITTLE COLORADO RIVER BASIN

09385700 LITTLE COLORADO RIVER BELOW SALADO SPRINGS NEAR ST. JOHNS, AZ

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
AUG 1985												
15...	1700	12	1600	8.30	28.5	24.0	--	--	--	490	220	140

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
AUG 1985											
15...	34	180	4	14	--	274	310	200	1.3	19	--

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
AUG 1985											
15...	1100	1.4	--	<0.10	--	--	--	--	--	--	0.02

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
AUG 1985											
15...	0.06	--	30	<1	10	120	<0.5	330	<1	<1	2

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)
AUG 1985											
15...	--	4	--	12	--	<2	--	--	17	<0.1	--

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
AUG 1985											
15...	1	4	<1	<2	1400	--	--	8	<0.01	--	--

< Actual value is known to be less than value shown.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

GILA RIVER BASIN

09498350 MIAMI WASH AT STATE HIGHWAY 88 NEAR CLAYPOOL

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
MAR 1985 01...	1015	13	580	7.70	--	10.0	680	9.8	98	--	--	--
AUG 29...	1045	0.1	2400	6.72	--	26.0	678	5.7	80	1200	1200	420

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
MAR 1985 01...	--	--	--	--	--	79	190	--	--	--	392
AUG 29...	48	84	1	--	--	62	1200	110	--	41	--

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
MAR 1985 01...	--	--	0.10	--	0.18	0.52	0.7	0.8	3.5	0.13	--
AUG 29...	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)
MAR 1985 01...	--	5000	100	--	--	--	--	--	--	--	--
AUG 29...	--	--	--	--	--	31	<2	--	5	--	20

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)
MAR 1985 01...	1200	110	3000	17	7	<1	--	620	570	--	11
AUG 29...	--	340	--	<9	--	<30	57	--	7100	--	--

DATE	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CYANIDE DISSOLVED (MG/L AS CN) (00723)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
MAR 1985 01...	6	--	--	--	--	--	60	30	--	249	8.7
AUG 29...	160	--	--	--	1700	<18	--	84	--	--	--

< Actual value is known to be less than value shown.

GILA RIVER BASIN

09498360 MIAMI WASH TRIBUTARY NO. 2 (EAST SIDE) NEAR CLAYPOOL

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
AUG 1985												
29...	1215	--	4100	3.15	35.0	34.5	678	5.5	--	2100	0	580

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
AUG 1985											
29...	160	120	1	--	--	0	2500	110	--	70	--

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
AUG 1985											
29...	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
AUG 1985											
29...	--	--	--	--	--	17	31	--	30	--	60

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)
AUG 1985											
29...	--	15000	--	160000	--	<30	250	--	47000	--	--

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
AUG 1985											
29...	<30	--	--	--	2400	<18	--	2200	--	--	--

< Actual value is known to be less than value shown.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LITTLE COLORADO RIVER BASIN

09397100 LEROUX WASH NEAR HOLBROOK, AZ

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUL 1985					
16...	1400	E7.0	--	43200	--
SEP					
19...	1150	359	15.5	71500	69300
19...	1210	359	15.5	67400	65300

E Estimated

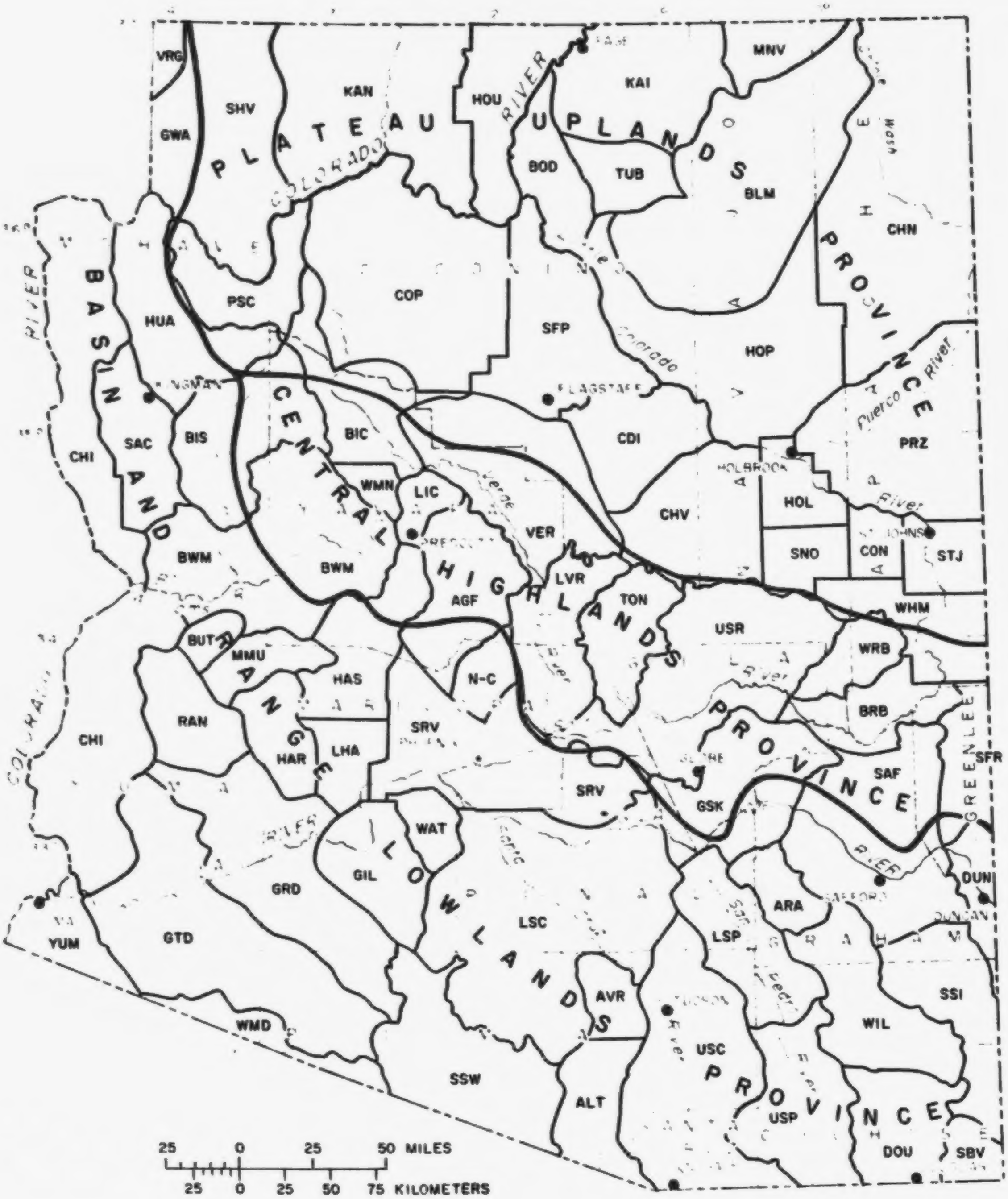

VRG
GWA
SHV
KAN
HOU
KAI
MNV
PLATEAU UPLANDS PROVINCE
COLORADO
RIVER
BOD
TUB
BLM
CHN
COP
PSC
HUA
SFP
HOP
Colorado
FLAGSTAFF
KINGMAN
CDI
PRZ
Puerco River
BASIN AND RANGE
CENTRAL HIGHLANDS PROVINCE
SAC
BIS
BIC
CHI
WMN
LIC
PRESCOTT
VER
Verde
CHV
HOLBROOK
HOL
SNO
CON
ST JOHNS
STJ
River
BWM
BWM
AGF
LVR
TON
USR
WHM
WRB
BUT
MMU
HAS
N-C
BRB
RAN
CHI
SRV
HAR
LHA
SRV
GLOBE
GSK
SAF
SFR
GREENLEE
WAT
GIL
GRD
LSC
ARA
SAFFORD
DUN
DUNCAN
LOWLANDS PROVINCE
RIVER
YUM
GTD
LSP
SSI
AVR
TUCSON
WIL
WMD
USC
SSW
ALT
USP
DOU
SBV
25 0 25 50 MILES
25 0 25 50 75 KILOMETERS

Figure 8.--Index map of ground-water areas in Arizona.

AREAS AND ABBREVIATIONS

AGF = Agua Fria basin
ALT = Altar Valley
ARA = Aravaipa Valley
AVR = Avra Valley
BIC = Big Chino Valley
BIS = Big Sandy Valley
BWM = Bill Williams
BLM = Black Mesa
BRB = Black River basin
BOD = Bodaway Mesa
BUT = Butler Valley
CDI = Canyon Diablo
CHV = Chevelon
CHN = Chinle
COP = Coconino Plateau
CHI = Colorado River, Hoover Dam to Imperial Dam
CON = Concho
DOU = Douglas basin
DUN = Duncan basin
GIL = Gila Bend basin
GRD = Gila River from Painted Rock Dam to Texas Hill
GSK = Gila River from head of San Carlos Reservoir to Kelvin
GTD = Gila River from Texas Hill to Dome
GWA = Grand Wash
HAR = Harquahala Plains
HAS = Hassayampa basin
HOL = Holbrook
HOP = Hopi
HOU = House Rock
HUA = Hualapai Valley
KAI = Kaibito
KAN = Kanab
LIC = Little Chino Valley
LHA = Lower Hassayampa
LSP = Lower San Pedro basin
LSC = Lower Santa Cruz basin
LVR = Lower Verde River
MMU = McMullen Valley
MNV = Monument Valley
N-C = New River-Cave Creek
PSC = Peach Springs Canyon
PRZ = Puerco-Zuni
RAN = Ranegras Plain
SAC = Sacramento Valley
SAF = Safford basin
SRV = Salt River Valley
SBV = San Bernardino Valley
SFP = San Francisco Peaks
SFR = San Francisco River basin
SSI = San Simon basin
SSW = San Simon Wash
SHV = Shivwits
SNO = Snowflake
STJ = St. Johns
TON = Tonto basin
TUB = Tuba City
USR = Upper Salt River basin
USP = Upper San Pedro basin
USC = Upper Santa Cruz basin
VER = Upper Verde River
VRG = Virgin River
WAT = Waterman Wash
WMD = Western Mexican drainage
WHM = White Mountains
WRB = White River basin
WIL = Willcox basin
WMN = Williamson Valley
YUM = Yuma

LATITUDE-LONGITUDE (HYDROLOGIC UNIT)	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet NGVD a/)	TYPE OF WELL	RECORDS AVAILABLE (Years)	WATER LEVELS, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1985	Date
					AGUA FRIA BASIN						
343157N1121354.1 (15070102)	(A-13-1)2cac	200	4,603	Stock	1973-85	82.3	4- 1-80	93.4	2- 6-81	85.7	3- 5
					ARAVAIPA VALLEY						
323753N1100806.1 (15050203)	(D-9-22)19dcc	---	4,280	Stock	1949, 1951-78, 1980-85	10.5	1-24-75	103.4	2-20-81	99.0	2-20
					AVRA VALLEY						
320850N1111459.1 (15050304)	(D-15-11)5ccd	712	2,368	Unused	1953-57, 1959-60, 1962-85	281.1	3- 6-53	349.3	12- 5-84	349.3	12- 5
					BIG CHINO VALLEY						
345608N1123323.1 (15060201)	(B-18-3)23bbc	61	4,420	Unused	1952-67, 1969-85	8.9	2-10-66	18.5	5-31-55	15.6	1-21
					BIG SANDY VALLEY						
351119N1133708.1 (15030201)	(B-21-13)24bcd	404	3,620	Stock	1961-62, 1964-80, 1982-85	370.3	2- 3-78	395.2	1-28-64	374.8	1-24
					BILL WILLIAMS						
342828N1125318.1 (15030203)	(B-13-6)9dcd	52	2,500	Irrigation	1945-49, 1951-57, 1959-85	14.0	1-17-45	19.9	1-19-77	15.6	2-20
					BLACK MESA						
360055N1103040.1 (15020012)	04 075-00.61X16.21 Navajo Indian Res.	1,683	5,858	Unused	1972-85	323.9	2- 1-73	357.4	5-17-85	357.4	5 17
					BUTLER VALLEY						
340059N1134119.1 (15030105)	(B-8-14)23ccd	500	1,600	Unused	1980-85	322.6	1-17-84	326.9	2-11-80	323.4	2-22
					CANYON DIABLO						
345503N1104503.1 (15020008)	(A-18-15)28aad	500	5,180	Observation	1969-74, 1976-85	263.6	3- 7-85	268.7	1- 3-79	263.6	3- 7

See footnote at end of table.

LATITUDE-LONGITUDE (HYDROLOGIC UNIT)	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet NGVD a/)	TYPE OF WELL	RECORDS AVAILABLE (Years)	WATER LEVELS, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1985	Date
CHEVELON											
344106N1102806.1 (15020010)	(A-15-18)19aaa	940	6,115	Test	1973, 1976-85	838.3	1-14-77	845.1	1-23-81	839.4	4-19
355223N1105223.1 (15020008)	(A-17-14)17add	600	5,540	Stock	1964, 1968, 1970-71, 1974, 1977-78, 1980-85	405.7	4- 6-71	407.3	10-16-68	406.0	4-23
CHINLE											
361317N1093558.1 (14080204)	10 071-05.55X01.98	200	5,425	Observation	1966-67, 1969-85	16.1	3-27-85	29.4	7-12-66	16.1	3-27
COLORADO RIVER, HOOVER DAM TO IMPERIAL DAM											
333829N1141348.1 (15030106)	(B-4-19)33cca	---	917	Domestic	1974, 1976-85	25.8	1-17-85	33.2	2- 3-76	25.8	1-17
CONCHO											
342817N1093336.1 (15020002)	(A-12-26)2bda	100	6,295	Stock	1975-85	68.3	5- 6-75	106.8	4-14-81	85.1	4-25
342555N1093216.1 (15020002)	(A-12-26)13dcd	300	5,970	Unused	1975-85	45.2	4-14-76	59.0	9-24-81	48.7	4-24
343432N1095004.1 (15020001)	(A-14-24)29ddc	335	5,640	Stock	1975-85	231.1	4- 5-83	280.5	9-22-80	270.7	4-30
343716N1093857.1 (15020002)	(A-14-25)E12cdd2	452	5,430	Irrigation	1953-58, 1960-85	11.7	5- 1-62	32.6	1-11-77	26.7	4- 3
343623N1094032.1 (15020002)	(A-14-25)14ccd	350	5,600	Stock	1975-85	172.4	3- 5-75	226.9	9-25-81	193.4	4-23
343601N1093558.1 (15020002)	(A-14-26)21bcc	345	5,475	Stock, Irrigation	1950, 1955, 1975-85	9.0	11- 1-50	37.1	9-24-80	25.2	4-23
DOUGLAS BASIN											
315042N1094143.1 (15080301)	(D-18-26)28aaa2	390	4,268	Irrigation	1965-76, 1978-85	89.0	2-11-65	178.6	1-28-85	178.6	1-28
313826N1094023.1 (15080301)	(D-21-26)2baa	121	4,130	Unused	1947-85	36.6	8-26-47	110.5	2-16-83	106.0	1-29
313332N1094300.1 (15080301)	(D-21-26)32dad	400	4,075	Irrigation	1946, 1954-64, 1966-76, 1978-79, 1981-85	41.2	5- 1-46	81.9	2-20-75	71.8	1-29
312527N1093957.1 (15080301)	(D-23-26)13ccc	---	4,010	Unused	1954-69, 1971-72, 1974-75, 1978-85	53.3	1- 9-56	68.4	1-24-72	63.1	1-29
DUNCAN BASIN											
325114N1091058.1 (15040002)	(D-7-31)4bcc	75	3,544.4	Irrigation	1939-43, 1945-85	21.9	2-19-68	41.0	8- 8-56	25.3	2- 8

See footnote at end of table.

LATITUDE-LONGITUDE (HYDROLOGIC UNIT)	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet NGVD a/)	TYPE OF WELL	RECORDS AVAILABLE (Years)	WATER LEVELS, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1985	Date
					GILA BEND BASIN						
330258N1123859.1 (15070101)	(C-4-4)27daa	880	745	Irrigation	1966-85	163.7	1-22-85	214.0	1-11-77	163.7	1-22
325650N1125527.1 (15070101)	(C-5-6)31cbb	1,875	718	Irrigation	1972, 1974-75, 1977, 1979-85	51.1	1-24-84	208.9	1-12-77	156.5	2- 7
					GILA RIVER DRAINAGE FROM PAINTED ROCK DAM TO TEXAS HILL						
330514N1132310.1 (15070210)	(C-4-11)15bab	510	691	Irrigation	1967, 1976, 1978-85	222.8	3- 8-67	297.7	2-12-81	290.5	1-22
325353N1133211.1 (150070201)	(C-6-12)19bba	1,352	383	Unused	1945-50, 1952-85	22.8	1-26-84	44.9	3-16-50	24.4	1-21
					GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN						
332102N1102802.1 (15040007)	(D-1-18)11dcc	---	2,662	Domestic, Irrigation	1967-85	19.8	2- 6-85	38.7	3- 2-67	19.8	2- 6
330858N1104951.1 (15050100)	(D-3-15)29aba	300	2,740	Irrigation	1952-78, 1980-85	81.6	2-25-60	102.2	9-10-57	88.6	1- 4
					GILA RIVER FROM TEXAS HILL TO DOME						
324625N1135406.1 (15070201)	(C-7-16)33daa	---	278	Observation	1964-85	7.4	1-16-76	21.2	1-29-64	7.7	1-22
					HARQUAHALA PLAINS						
334248N1133013.1 (15070104)	(B-4-12)4cca	---	1,640	---	1963, 1965, 1967-71, 1973-74, 1978-79, 1981, 1985	388.0	1-21-71	461.6	12-30-81	455.6	11-27
					HASSAYAMPA BASIN						
340147N1124923.1 (15070103)	(B-8-5)18ccc	450	2,455	Domestic	1978-85	324.7	1-10-83	341.3	1-11-85	341.3	1-11
					HOLBROOK						
345310N1100625.1 (15020002)	(A-17-21)10cba	285	5,165	Unused	1952-58, 1960-85	49.5	2-24-82	54.0	2-16-84	53.8	4-19
					HOPI						
350002N1103555.1 (15020008)	(A-19-16)36dbb	610	4,890	Unused	1976-85	30.9	2- 9-79	37.4	2-10-76	33.9	3- 7
					HOUSE ROCK						
365942N1112925.1 (14070006)	(A-42-8)36cbc	655	3,735	Observation	1968-85	50.6	1- 2-84	235.0	4-30-68	52.0	4-10

See footnote at end of table.

LATITUDE-LONGITUDE (HYDROLOGIC UNIT)	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet NGVD a/)	TYPE OF WELL	RECORDS AVAILABLE (Years)	WATER LEVELS, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1985	Date
					HUALAPAI VALLEY						
352740N1133555.1 (15010007)	(B-24-12)17cbc	440	4,255	Unused	1953-64, 1967-85	141.7	3-27-79	147.5	6-22-55	144.5	1-24
					KANAB						
365403N1124528.1 (15010003)	(B-40-4)6aac	202	5,140	Irrigation	1975-76, 1978-85	79.2	1- 7-81	83.4	1- 2-83	81.0	4- 3
					LITTLE CHINO VALLEY						
344846N1122714.1 (15060201)	(B-17-2)N34acc	420	4,500	Unused	1950-85	3.7	4- 1-80	13.7	11-18-80	6.8	3- 5
					LOWER HASSASYAMPA						
332934N1125728.1 (15070104)	(B-2-7)27aab	350	1,146	Irrigation	1953, 1956, 1958-85	162.8	12- 3-53	292.6	1-14-85	292.6	1-14
					LOWER SAN PEDRO BASIN						
325528N1104338.1 (15050203)	(D-6-16)8dac5	54	2,040	Unused	1968-75, 1977-85	35.6	3- 8-68	41.0	1-31-81	35.7	1- 4
323644N1104612.1 (15050203)	(D-9-15)36bbc	92	4,500	Domestic	1949-85	19.4	2- 6-79	83.0	5-13-57	21.1	1- 8
					LOWER SANTA CRUZ BASIN						
330435N1120858.1 (15050303)	(D-4-2)15cbc	372	1,229	Unused	1951-85	109.5	2-12-51	368.7	1-10-78	347.4	11-16
324917N1113536.1 (15050303)	(D-7-7)11cdd	600	1,494	Irrigation	1942-57, 1959-64, 1967-85	85.9	3-11-42	299.1	3- 6-75	261.0	11-14
324035N1114123.1 (15050303)	(D-8-6)35ddd2	770	1,545	Irrigation	1949, 1951-64, 1966-85	100.8	2- 7-49	200.3	1-18-82	178.8	11- 8
324312N1113330.1 (15050303)	(D-8-8)18cdd1	600	1,596	Irrigation	1942, 1949, 1952-57, 1959-60, 1962-64, 1967-85	135.5	3- 5-42	397.4	1-14-77	342.0	10-31
323753N1112046.1 (15050303)	(D-9-10)19aaa	600	1,835	Unused	1953-64, 1966-85	181.1	3-28-55	226.7	1-17-68	206.4	11-15
323942N1110302.1 (15050100)	(D-9-13)7cbc	275	3,115	Stock	1952-79, 1981-85	43.0	9-23-55	111.5	1- 6-53	45.7	12-13
323437N1115958.1 (15050306)	(D-10-3)12aab	255	1,631	Dometstic	1956-57, 1964-75, 1977-85	206.8	2-11-57	219.6	9-27-56	212.8	12-20
					LOWER VERDE RIVER						
341551N1111842.1 (15060203)	(A-11-10)27ddb	400	5,052	Public Supply	1975, 1979-85	89.1	1-19-84	128.7	4-12-79	89.6	1-17

See footnote at end of table.

LATITUDE-LONGITUDE (HYDROLOGIC UNIT)	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet NGVD a/)	TYPE OF WELL	RECORDS AVAILABLE (Years)	WATER LEVELS, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1985	Date
					McMULLEN VALLEY						
335727N1130451.1 (15070104)	(B-7-8)15baa	1,812	2,257	Irrigation	1962-65, 1967-85	479.4	1- 2-64	580.4	2-28-85	580.4	2-28
					NEW RIVER---CAVE CREEK						
335033N1121114.1 (15070102)	(A-6-2)30aaa	230	1,721	Stock	1976, 1979-85	194.4	11-28-84	214.0	3- 5-81	194.4	11-28
					PUERCO---ZUNI						
345620N1091040.1 (15020004)	(A-18-30)20cdd	420	6,450	Stock, Domestic	1971-85	358.8	4-18-85	366.8	1-29-76	358.8	4-18
					RANEGRAS PLAIN						
334839N1135141.1 (15030105)	(B-5-15)6baa2	---	1,156	---	1979-85	227.7	1-10-79	251.4	2-12-81	231.6	1-16
					SACRAMENTO VALLEY						
350937N1140442.1 (15030103)	(B-21-17)34ddb	80	3,050	Unused	1952-78, 1982-85	57.4	1-17-84	62.6	2-13-53	57.7	1-16
					SAFFORD BASIN						
330240N1100311.1 (15040005)	(D-4-22)35ada	75	2,859.5	Stock	1939-44, 1946-85	5.7	2- 7-85	41.6	1-28-58	5.7	2- 7
325230N1094428.1 (15040005)	(D-6-25)25cdd	50	2,873	Irrigation	1958-61, 1968-85	13.8	5- 9-68	28.0	1-13-58	16.3	2- 7
324855N1094033.1 (15040005)	(D-7-26)22bab	90	2,951.2	Irrigation	1940-85	20.3	5-25-42	68.2	7- 1-57	24.1	2- 8
324113N1094154.1 (15040005)	(D-8-26)33ccc1	400	3,340	Irrigation	1950-85	17.0	3-13-50	83.5	3-14-75	29.3	2- 7
					SALT RIVER VALLEY						
333217N1115123.1 (15060106)	(A-2-5)8aaa	1,000	1,300	Unused	1972-85	281.7	1-23-73	311.0	5-10-78	285.7	12-18
333520N1115358.1 (15060106)	(A-3-4)24caa	700	1,375	Irrigation	1957, 1962-66, 1969, 1973-76, 1978-85	205.2	2-12-57	287.9	11-27-84	287.9	11-27
334011N1121043.1 (15070102)	(A-4-2)20cdd	528	1,290	Irrigation	1963-67, 1969-74, 1976-85	394.6	1-25-66	445.7	1- 4-85	445.7	1- 4
332416N1123901.1 (15070101)	(B-1-4)27abb	350	988	Irrigation	1956-68, 1970, 1972-85	119.1	1- 2-85	159.5	1-14-72	119.1	1- 2

See footnote at end of table.

LATITUDE-LONGITUDE (HYDROLOGIC UNIT)	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet NGVD a/)	TYPE OF WELL	RECORDS AVAILABLE (Years)	WATER LEVELS, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1985	Date
					SALT RIVER VALLEY--Continued						
333052N1122024.1 (15070102)	(B-2-1)14cbb	708	1,057	Unused	1960-66, 1968-85	130.1	12-21-65	218.8	1-16-80	201.4	12-20
331314N1113040.1 (15050100)	(D-2-8)27ddd	614	1,552	Unused	1949-54, 1957, 1964-69, 1971-72, 1976-78, 1980-85	231.7	1-19-49	505.6	2- 2-76	485.1	12- 6
					SAN BERNARDINO VALLEY						
312006N1091806.1 (15080302)	(D-24-30)16ccc	100	3,800	--	1977, 1980-83, 1985	29.0	2-18-83	30.7	3- 1-85	30.7	3- 1
					SAN FRANCISCO PEAKS						
352823N1115013.1 (15020016)	(A-24-5)11cdb	292	7,386	Stock	1964-65, 1967-73, 1975-78, 1980-85	261.4	1- 2-81	284.4	11- 3-67	264.9	5-10
					SAN SIMON BASIN						
322110N1093627.1 (15040006)	(D-12-27)32aab	250	3,980	Stock	1952-57, 1959-64, 1967-75, 1977-85	132.5	12-20-56	137.2	12-12-55	133.4	2-20
321200N1090945.1 (15040006)	(D-14-31)22adc	800	3,690	Irrigation	1973-85	92.6	4- 5-78	131.0	3- 5-80	98.4	2-27
					SAN SIMON WASH						
315444N1115503.1 (15080101)	(D-17-4)34abd	201	2,301.4	Irrigation	1954-57, 1968-85	115.6	1- 2-84	147.3	6-27-56	120.6	12-10
					SNOWFLAKE						
342811N1100612.1 (15020005)	(A-13-21)34dcc2	254	5,658	Domestic	1964-69, 1971-85	98.8	12- 4-64	136.8	2-16-82	127.9	4- 5
					ST. JOHNS						
342700N1092512.1 (15020002)	(A-12-28)7cdb	720	5,925	Irrigation	1956-57, 1966-85	28.6	4- 6-57	55.2	9-12-75	37.6	4-10
342548N1092503.1 (15020002)	(A-12-18)19bad	650	5,925	Irrigation	1975-81, 1984-85	17.0	4-29-80	38.8	9- 9-76	18.4	4-24b
343439N1092703.1 (15020002)	(A-14-27)35bdc	---	5,635	Stock	1975-81, 1984-85	81.8	5-11-78	113.6	9-25-81	86.6	4-25c
					TONTO BASIN						
340458N1112118.1 (15060105)	(A-9-10)32bdb	---	3,030	Stock	1972-78, 1981-85	23.5	3- 1-73	44.0	1-31-75	28.2	1-17
					TUBA CITY						
360918N1110807.1 (15020018)	03 077-7.55X6.55 Navajo Indian Res.	705	5,108	Industrial	1966, 1973-85	57.5	3-28-85	85.6	10-13-66	57.5	3-28
					UPPER SALT RIVER BASIN						
332658N1104932.1 (15060103)	(A-1-15)9aad2	---	3,237	---	1970-85	8.8	2-28-79	65.5	1-19-77	23.0	2- 6
332055N1104555.1 (15060103)	(D-1-15)13bda	105	3,800	Domestic, Irrigation	1946-55, 1957, 1959-85	3.5	5- 5-49	39.5	2-14-61	6.7	2- 6

See footnote at end of table.

LATITUDE-LONGITUDE (HYDROLOGIC UNIT)	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet NGVD a/)	TYPE OF WELL	RECORDS AVAILABLE (Years)	WATER LEVELS, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1985	Date
					UPPER SAN PEDRO BASIN						
320005N1101709.1 (15050202)	(D-16-20)34acd2	117	3,525	Irrigation	1969-85	74.2	1- 9-85	90.1	1-26-76	74.2	1- 9
315508N1101334.1 (15050202)	(D-17-21)32bab	520	3,705	Stock	1944-85	16.9	12- 9-46	47.8	1-22-75	38.8	1-11
315335N1100901.1 (15050202)	(D-18-21)1dca	396	4,140	Stock	1961-63, 1966, 1968, 1970-85	360.5	4-20-66	367.1	2-10-71	e	1-11
312250N1100639.1 (15050202)	(D-23-22)33dcd2	91.5	4,225	Observation	1954-63, 1966-85	11.5	8-24-55	23.8	2-13-81	13.8	1-18
					UPPER SANTA CRUZ BASIN						
320824N1105930.1 (15050301)	(D-15-13)11cba	224	2,457	Observation	1931-41, 1946-85	30.5	2-15-32	155.3	12-28-81	129.6	12-30
315511N1105452.1 (15050301)	(D-17-14)21acd	230	2,800	Irrigation	1971-78, 1980-85	179.8	1- 2-71	195.1	12-11-84	195.1	12-11
312848N1105732.1 (15050301)	(D-22-13)25ddd	105	3,482	Stock	1939-45, 1947-51, 1953-61, 1963-66, 1968-70, 1972-73, 1975-79, 1981-85	42.0	12-11-84	100.7	3-11-55	42.0	12-11
					UPPER VERDE RIVER						
344307N1115527.1 (15060202)	(A-15-4)4ddc1	250	3,355	Domestic	1959-85	36.8	8-18-59	60.4	1-25-77	56.1	3-29
					VIRGIN RIVER						
365434N1135547.1 (15010010)	(B-41-15)33cab	98	1,910	Domestic	1976, 1978-85	54.2	3- 3-82	74.6	11- 3-76	54.7	4- 3
					WATERMAN WASH						
331435N1122302.1 (15070101)	(C-2-1)20bad	800	1,130	Unused	1960-61, 1965, 1967, 1969-76, 1978-85	300.4	1-18-61	399.0	1-21-82	358.5	1- 7
					WHITE MOUNTAINS						
341429N1100252.1 (15020005)	(A-10-22)30aba	750	6,485	Municipal	1969-85	521.6	4- 4-85	532.0	2-13-74	521.6	4- 4
					WILLCOX BASIN						
321834N1095430.1 (15050201)	(D-13-24)16bbb	1,356	4,209	Observation	1942, 1944-85	29.7	5-13-42	130.7	8-31-62	106.8	2-19
321413N1095729.1 (15050201)	(D-14-23)12bbb1	225	4,359	Stock	1953-69, 1971-77, 1979-85	170.0	2- 5-53	253.1	2-19-85	253.1	2-19

See footnote at end of table.

LATITUDE-LONGITUDE (HYDROLOGIC UNIT)	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet NGVD a/)	TYPE OF WELL	RECORDS AVAILABLE (Years)	WATER LEVELS, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1985	Date
			WILLCOX BASIN--Continued								
321115N1095552.1 (15050201)	(D-14-24)30dba	---	4,187	Stock	1942, 1944-57, 1963-85	16.0	10-21-55	33.9	1-14-74	28.1	1-21
320236N1094750.1 (15050201)	(D-16-25)16add	65	4,190	Stock	1942, 1944-57, 1959-85	27.0	2-18-69	45.2	6-12-47	43.2	1-21
			WILLIAMSON VALLEY								
344636N1123944.1 (15060201)	(B-16-4)14bbb	352	4,600	Irrigation	1952-53, 1955-56, 1958-82, 1984-85	flowing	3-14-78	7.8	10-23-56	0.9	1-22d
			YUMA								
323840N1143201.1 (15030108)	(C-9-22)17dca	191	205	Observation	1945-58, 1960-85	52.5	11-15-60	97.6	9- 5-46	59.6	1-25

a/NGVD, National Geodetic Vertical Datum of 1929.
b Water level, 17.8 ft, 4-9-84.
c Water level, 106.1 ft, 4-30-84.
d Water level, 1.4 ft, 1-24-84.
e Well being pumped.

WATER-QUALITY COLLECTION
SITE INFORMATION

LOCAL WELL NUMBER	GROUND-WATER AREA	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
B-14-01 14ACC	AGF	04	025	343540	1121957	15070102	P	30.0	--
D-20-08 35BDB	ALT	04	019	313850	1112957	15050304	H	495 598	595 650
D-15-10 33DBC2	AVR	04	019	330435	1111942	--	-	--	--
B-21-02 14BCC	BIC	04	025	351207	1122837	15060201	P	1390	1700
B-24-08 17DCD1	BIC	04	025	352730	1130810	15060201	-	100	--
B-07-15 02DDC	BUT	04	027	335823	1134715	15030105	I	300	520
B-07-15 10AAD	BUT	04	027	335810	1134802	15030105	I	--	--
B-08-13 04DDD	BUT	04	027	340333	1133637	15030105	U	--	--
B-08-14 20DAB	BUT	04	027	340122	1134403	15030105	U	--	--
B-08-14 23CCD	BUT	04	027	340059	1134119	15030105	U	450	500
B-08-14 25CBA	BUT	04	027	340028	1134030	15030105	I	--	--
B-08-14 29CDD	BUT	04	027	340004	1134436	15030105	-	365	1170
	CHI	06	071	345445	1143842	--	H	--	--
04N/24E 17H1	CHI	06	071	342638	1142840	15030101	-	--	--
07S/21E 25H1	CHI	06	065	333216	1144349	15030104	-	155 258 362 407	161 264 368 413
07S/22E 35C1	CHI	06	065	333140	1143904	15030104	-	194 297 401 504	200 303 407 510
08S/21E 23R1	CHI	06	065	332748	1144438	15030104	-	25.5 90.0 193 277 386	31.5 96.0 199 283 392
08S/22E 17N1	CHI	06	065	332840	1144226	15030104	-	174 258 342 426	180 264 348 432
09N/22E 01F1	CHI	04	015	345421	1143809	15030101	H	--	--
09S/21E 25D1	CHI	06	025	332224	1144300	15030104	-	53.5 118	59.5 124
B-03-19 29ABA	CHI	04	027	333448	1141419	15030106	U	--	--
B-04-19 29BCB	CHI	04	012	333946	1141501	--	-	--	--
B-05-19 32AAC	CHI	04	027	334408	1141519	15030106	S	--	--
B-24-18 30CCD	CHI	04	015	352600	1141457	--	-	--	--
B-25-20 15AAA	CHI	04	015	353337	1142352	--	-	--	--
B-26-19 35DDD	CHI	04	015	353528	1141625	--	-	--	--
B-27-21 25BAA	CHI	04	015	354217	1142840	--	-	--	--
S33 E66 17AAB	CHI	32	003	350446	1143845	--	P	--	--
10N/22E 22B1	CHI RES	06	071	345709	1144011	--	H	--	--
B-17-21 05BCC3	CHI RES	04	015	345321	1143235	15030101	-	120	123
B-17-22 03BBC	CHI RES	04	015	345334	1143648	15030101	I	80.0 166 216	152 208 238
A-12-26 19ABA	CON	04	001	342551	1093745	15020002	I	--	--
D-19-26 04AAA	DOU	04	003	314902	1094147	15080301	I	80.0 120 480	246 475 650
D-20-26 25CBC	DOU	04	003	313941	1093906	--	-	--	--
D-23-27 09DAB	DOU	04	003	312638	1093559	15080301	I	116	496
D-05-30 35CDD	DUN	04	011	325655	1091350	15040002	-	260	--
D-06-31 17DCD	DUN	04	011	325417	1091127	--	-	--	--
D-07-30 05DBC	DUN	04	011	325107	1091740	--	-	--	--
D-07-31 04ACC	DUN	04	011	325143	1091033	--	-	--	--
D-07-31 21DDB	DUN	04	011	324824	1091004	--	-	--	--
D-08-32 19AAD	DUN	04	011	324337	1090559	--	-	--	--
D-08-32 34DCC	DUN	04	011	324112	1090321	--	-	--	--
D-09-31 02AAA	DUN	04	011	324106	1090807	--	-	--	--
A-01-15 15DAB	GSK	04	007	332543	1104837	--	-	--	--
A-01-15 21ABC	GSK	04	007	332508	1104956	--	-	--	--
D-01-16 29AC UNSURV	GSK	04	007	331913	1104343	--	-	--	--
D-04-14 06CDC	GSK	04	021	330623	1105732	--	-	--	--
D-04-14 16CBB	GSK	04	021	330459	1105537	--	-	--	--
D-04-16 16ADC	GSK	04	007	330509	1104243	--	-	--	--
D-05-15 24BAA3	GSK	04	007	325924	1104556	--	-	--	--
C-16-06 22CBB	GTD	04	019	320104	1125242	15070203	P	--	--
B-03-11 36BBB	HAR	04	027	333358	1132105	15070104	I	465 597	580 912
C-01-08 08BBB	HAR	04	013	332145	1130627	15070104	I	--	--
B-01-05 16BBB	LHA	04	013	332607	1124649	15070103	I	--	--
B-02-06 20DAA	LHA	04	013	333001	1125304	15070104	I	72.0 528	529 1010
C-01-06 27BBC	LHA	04	013	331858	1125156	15070104	I	--	--
B-16-02 03DDC4	LIC	04	025	344723	1122657	15060202	H	--	--
B-17-02S34BBA	LIC	04	025	344818	1122740	15060202	I	476	628
D-04-09 04DDD	LSC	04	021	330618	1112518	--	-	--	--

See codes used to identify State, County, and Primary Use of Water at end of table.

WATER-QUALITY COLLECTION
SITE INFORMATION--Continued

LOCAL WELL NUMBER	GROUND-WATER AREA	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
D-05-03 16CCC1	LSC	04	021	325908	1120350	15050303	I	105	--
D-05-03 16CCC2	LSC	04	021	325909	1120350	15050303	I	640	--
D-05-07 24CDA	LSC	04	021	325812	1113536	15050100	I	150	620
D-06-03 35DDC	LSC	04	021	325101	1120004	--	-	--	--
D-06-04 04DDD2	LSC	04	021	325523	1115544	15050303	I	--	--
D-06-04 04DDD3	LSC	04	021	325523	1115543	--	-	--	--
D-06-07 15ACC2	LSC	04	021	325407	1113615	--	-	--	--
D-07-04W01DAD	LSC	04	021	325041	1115342	--	-	--	--
D-07-06 29CDD	LSC	04	021	324640	1114454	--	-	--	--
D-07-06 34CDD	LSC	04	021	324550	1114252	15050303	U	200	--
D-09-07 02CDD	LSC	04	021	323954	1113531	15050303	I	416	--
D-09-07 03ADD	LSC	04	021	324007	1113610	15050303	I	250	980
D-10-09 10AAD2	LSC	04	021	323413	1112351	--	-	--	--
D-10-10 05DAB	LSC	04	021	323450	1111958	15050303	I	240	--
D-11-11 35DDD	LSC	04	019	322530	1111100	15050303	I	400	480
A-04-02 11ADB	N-C	04	013	334230	1120709	15070102	U	425	--
A-04-02 16ABB	N-C	04	013	334152	1120937	15070102	I	.00 1330	1330 1430
A-05-02 03DBC	N-C	04	013	334803	1120832	--	-	--	--
A-06-04 26DCC	N-C	04	013	334943	1115459	15060106	P	150	--
A-14-29 35CDC2	PRZ	04	001	343414	1091420	15020003	S	449	735
B-25-11 02CBC	PSC	04	015	353444	1132549	--	-	--	--
B-26-14 25ACB	PSC	04	015	353706	1134337	--	-	--	--
B-03-15 02DDB	RAN	04	012	333735	1134612	--	H	--	--
B-04-14 04AAC	RAN	04	027	334320	1134206	15030105	H	577	--
B-04-16 13DBB	RAN	04	012	334120	1135145	--	H	--	--
B-05-15 04BDD	RAN	04	012	334820	1134937	--	-	--	--
B-05-15 20DDD2	RAN	04	012	334515	1135007	--	-	--	--
B-05-16 09BCC	RAN	04	027	334722	1135620	15030105	S	--	--
B-06-16 08CDA	RAN	04	012	335223	1135700	--	-	--	--
B-06-16 23DDC	RAN	04	027	335028	1135321	15030105	I	190	--
D-04-23 19BCB2	SAF	04	009	330424	1100204	--	-	--	--
D-04-23 22CAB	SAF	04	009	330411	1105842	--	-	--	--
D-05-23 02CBB	SAF	04	009	330133	1095757	--	-	--	--
D-05-24 31ACC	SAF	04	009	325717	1095521	15040005	I	56.0	73.0
D-06-24 04ADD	SAF	04	009	325627	1095310	--	-	--	--
D-06-24 10ACB	SAF	04	009	325527	1095230	15040005	I	--	--
D-06-24 12ADC2	SAF	04	009	325536	1095012	15040005	I	30.0	43.0
D-06-25 05DBA	SAF	04	009	325618	1094817	--	-	--	--
D-06-25 17AAA2	SAF	04	009	325509	1094803	15040005	I	--	--
D-06-25 23BBAA	SAF	04	009	325407	1094545	--	-	--	--
D-06-25 35DBD	SAF	04	009	325203	1094527	15040005	I	27.0 78.0	65.0 80.0
D-06-25 36CBB	SAF	04	009	325200	1094456	15040005	I	1550 1900	1900 2160
D-06-28 31DAB2	SAF	04	009	325157	1093048	15040005	I	19.0	45.0
D-07-23 01DBD2	SAF	04	009	325100	1095635	15040005	I	--	--
D-07-24 04CCC2	SAF	04	009	325045	1095408	--	-	--	--
D-07-25 03CCB1	SAF	04	009	325058	1094653	15040005	I	.00 74.0	67.0 86.0
D-07-26 06ADD	SAF	04	009	325115	1094256	15040005	I	26.0	--
D-07-26 15BCC	SAF	04	009	324926	1094052	15040005	I	30.0	82.0
D-07-26 18AAB	SAF	04	009	324951	1094306	15040005	I	40.0	86.0
D-07-26 21ADD	SAF	04	009	324838	1094056	15040005	I	60.0 114	110 118
D-07-26 24ABA	SAF	04	009	324856	1093806	15040006	I	--	--
D-07-26 28ACB3	SAF	04	009	324752	1094123	15040005	-	62.0	86.0
D-07-27 02AAB2	SAF	04	009	325131	1093252	15040005	F	24.0	500
D-07-27 08DBC2	SAF	04	009	325007	1093515	15040005	I	--	--
D-07-27 16CCC	SAF	04	009	324859	1093545	--	-	--	--
D-08-26 06AAC1	SAF	04	009	324611	1094311	--	-	--	--
D-08-26 07BAA2	SAF	04	009	324527	1094328	--	-	--	--
D-08-26 07DBD	SAF	04	009	324456	1094307	--	-	--	--
D-08-26 15DCB2	SAF	04	009	324358	1094018	--	-	--	--
D-08-26 15DCB4	SAF	04	009	324358	1094016	--	-	--	--
D-08-26 17DDD	SAF	04	009	324349	1094154	--	-	--	--
D-08-26 28ABC	SAF	04	009	324247	1094121	--	-	--	--
D-09-26 06BDA1	SAF	04	009	324057	1094337	--	-	--	--
D-09-26 18DDA	SAF	04	009	323850	1094307	--	-	--	--
D-24-30 11CAD1	SBV	04	003	312117	1091540	15080302	S	--	--
D-24-30 14BDB	SBV	04	003	312044	1091541	15080302	S	--	--
D-24-30 15CDC1	SBV	04	003	312011	1091642	15080302	H	--	--
D-24-30 15DAD	SBV	04	003	312022	1091608	15080301	S	--	--
D-24-30 15DDC	SBV	04	003	312010	1091616	15080302	S	--	--
D-24-30 23BAB1	SBV	04	003	312002	1091546	15080302	I	--	--
A-01-02 01BDB	SRV	04	013	332738	1120643	15060106	-	--	--
A-01-02 01CAC	SRV	04	013	332720	1120641	15060106	I	--	--
A-01-03 15ABC	SRV	04	013	332603	1120210	15060106	-	--	--
A-01-03 21ACC	SRV	04	013	332455	1120318	15060106	-	--	--
A-01-04 02DDB	SRV	04	013	332712	1115439	15060106	P	--	--

See codes used to identify State, County, and Primary Use of Water at end of table.

WATER-QUALITY COLLECTION
SITE INFORMATION--Continued

LOCAL WELL NUMBER	GROUND-WATER AREA	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
A-01-06 04DDC	SRV	04	013	332707	1114421	15060106	I	260	800
								426	1180
A-02-01 04BBA2	SRV	04	013	333304	1121604	15070102	I	140	--
A-02-02 26CDB	SRV	04	013	332901	1120744	15060106	-	--	--
A-02-03 28CAA	SRV	04	013	332911	1120324	15060106	I	175	--
A-02-04 12BDD2	SRV	04	013	333156	1115405	15060106	I	--	--
A-02-04 24CAB	SRV	04	013	333007	1115413	15060106	P	300	1260
A-03-01 31ABB	SRV	04	013	333355	1121745	--	-	--	--
A-03-04 02DAA	SRV	04	013	333753	1115428	15060106	P	--	--
A-03-04 11CCC	SRV	04	013	333643	1115527	15060106	P	--	--
A-03-04 21ADA2	SRV	04	013	333530	1115638	15060106	P	--	--
A-03-05 26CCD	SRV	04	013	333408	1114903	15060106	H	525	--
A-03-05 28ADA	SRV	04	013	333442	1115021	15060106	-	480	--
A-04-01 34ABA	SRV	04	013	333908	1121432	15070102	I	850	1190
B-01-02 01CCC	SRV	04	013	332704	1122531	15070101	I	1220	--
B-01-02 17CAA	SRV	04	013	332542	1122913	15070101	I	500	1200
B-01-02 25BBC2	SRV	04	013	332416	1122532	--	-	--	--
B-01-03 24CBB2	SRV	04	013	332448	1123114	15070101	I	650	--
B-01-03 27CBB	SRV	04	013	332356	1123318	15070101	I	--	--
B-01-04 32BBB2	SRV	04	013	332328	1124135	15070103	-	520	--
B-02-02 23BBB	SRV	04	013	333028	1122635	15070102	-	--	--
B-06-03 33DCB	SRV	04	013	334848	1123429	15070102	C	--	--
C-01-04 03BDA	SRV	04	013	332223	1123901	15070101	-	--	--
D-01-06 27CDD	SRV	04	013	331826	1114345	--	-	--	--
D-01-09 07BDC2	SRV	04	021	332135	1112818	15050100	P	--	--
D-01-10 35DBC	SRV	04	021	331756	1111737	--	-	--	--
A-02-05 06ACB	SRV RES	04	013	333258	1115252	15060106	I	230	490
								500	1400
A-02-05 08CDD2	SRV RES	04	013	333132	1115154	15060106	-	--	--
A-02-05 11CAA	SRV RES	04	013	333153	1114847	15060106	I	--	--
A-02-05 14AAA	SRV RES	04	013	333126	1114816	15060106	I	--	--
A-02-05 14ADD	SRV RES	04	013	333102	1114816	15060106	I	--	--
A-02-05 16DDA	SRV RES	04	013	333043	1115021	15060106	I	--	--
A-02-05 23BDD	SRV RES	04	013	333010	1114847	15060106	I	--	--
A-02-05 30DBC	SRV RES	04	013	332903	1115254	15060106	I	275	--
D-02-04 25DDD	SRV RES	04	013	331310	1115333	15050100	I	250	575
018S21W32DDB	SSI	35	023	324137	1090136	--	-	--	--
028S21W30CAC	SSI	04	003	315015	1090143	00000000	N	--	--
028S21W30CCA	SSI	04	003	315010	1090148	00000000	N	--	--
D-12-28 21DCC	SSI	04	003	322210	1092930	15040006	I	--	--
D-13-28 10BCC	SSI	04	003	321907	1092859	15040006	I	290	--
D-13-28 22DDD	SSI	04	003	321654	1092807	--	-	--	--
D-13-29 21CCC	SSI	04	003	321645	1092356	--	-	--	--
D-13-29 25CCC	SSI	04	003	321552	1092051	15040006	-	403	--
D-13-29 25CCC2	SSI	04	003	321550	1092052	--	-	--	--
D-13-30 15DAA	SSI	04	003	321802	1091546	15040006	H	--	--
D-13-30 34DCC	SSI	04	003	321459	1091613	--	-	--	--
D-13-31 21CAD	SSI	04	003	321707	1091105	--	-	--	--
D-14-28 24ADB	SSI	04	003	321223	1092559	--	-	--	--
D-14-31 09ADD1	SSI	04	003	321352	1091033	--	-	--	--
D-14-31 09ADD3	SSI	04	003	321349	1091037	--	-	--	--
D-14-31 19BAC	SSI	04	003	321210	1091320	15040006	S	200	--
D-14-32 19BAA	SSI	04	003	321222	1090659	15040006	I	300	--
D-17-31 26DCA	SSI	04	003	315449	1090835	--	-	--	--
D-17-31 35BAA	SSI	04	003	315437	1090845	--	-	--	--
D-19-32 21DAC	SSI	04	003	314547	1090425	15040006	-	200	300
A-11-28 04CBD CCNN SP.	STJ	04	001	342240	1092318	15020002	U	--	--
A-11-28 04DBA	STJ	04	001	342247	1092252	15020002	U	--	--
A-11-28 04DBD	STJ	04	001	342241	1092254	15020002	U	--	--
A-11-28 09BDA 310CCNN C	STJ	04	001	342203	1092306	15020001	I	--	--
A-11-28 09DAD	STJ	04	001	342148	1092229	15020001	H	240	--
A-11-28 22BDA2	STJ	04	001	342024	1092203	15020001	U	160	550
A-11-29 28DBC TEP P-14 3	STJ	04	001	341913	1091635	15020001	N	815	917
								917	1080
								1080	1160
								1160	1240
								1240	1260
								1260	1430
								1430	1450
A-12-27 35CDA BIG WHITE	STJ	04	001	342324	1092716	15020002	-	--	--
A-12-28 17DCA	STJ	04	001	342603	1092355	15020002	U	--	--
A-13-27 13A	STJ	04	001	343215	1092520	15020002	S	--	--
LITTLE COLORADO R. BLW.L	STJ	04	001	342215	1092311	15020002	-	--	--
D-12-12 16DDD	USC	04	019	322252	1110650	15050301	I	68.0	225
D-12-13 22BBB	USC	04	019	322248	1110037	15050301	H	--	--
D-14-14 02BBB	USC	04	019	321457	1105327	15050302	P	150	251
D-16-15 14ACB	USC	04	019	320238	1104654	15050301	C	445	900
D-17-14 07DDD	USC	04	019	315728	1105639	15050301	I	150	728
								150	720
								700	1500

See codes used to identify State, County, and Primary Use of Water at end of table.

WATER-QUALITY COLLECTION
SITE INFORMATION--Continued

LOCAL WELL NUMBER	GROUND-WATER AREA	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
D-17-14 07DDD	USC	04	019	315728	1105639	15050301	I	1500	1500
D-19-13 29CBA	USC	04	019	314446	1110228	15050301	N	114 606	590 890
D-23-12 35BBD	USC	04	023	312321	1110530	15050301	S	--	--
D-24-14 05ADB2	USC	04	023	312223	1105542	15050301	N	--	--
D-24-23 13ABC1	USP	04	003	312052	1095735	15050202	P	--	--
D-24-23 13ABD	USP	04	003	312052	1095729	15050202	P	--	--
A-01-15 04CBD1	USR	04	007	332717	1105019	15060103	U	190.7	193.7
A-01-15 04CBD2	USR	04	007	332717	1105019	15060103	U	114.0	117.0
A-01-15 04CBD3	USR	04	007	332717	1105019	15060103	U	43.8	46.8
A-01-15 04DCC1	USR	04	007	332707	1104655	15060103	U	57.6	60.6
A-01-15 04DCC2	USR	04	007	332707	1104955	15060103	U	37.1	40.1
A-01-15 09DBC1	USR	04	007	332629	1104958	15060103	U	115.1	118.1
A-01-15 09DBC2	USR	04	007	332629	1104958	15060103	U	79.5	82.5
A-01-15 09DBC3	USR	04	007	332629	1104958	15060103	U	59.4	62.4
A-01-15 09DBC4	USR	04	007	332629	1104958	15060103	U	33.3	36.3
A-01-15 09DCD1	USR	04	007	332611	1104951	15060103	U	106.4	109.4
A-01-15 09DCD2	USR	04	007	332611	1104951	15060103	U	61.7	64.7
A-01-15 09DCD3	USR	04	007	332611	1104951	15060103	U	88.0	91.0
A-01-15 09DCD4	USR	04	007	332611	1104951	15060103	U	32.9	35.9
A-02-15 29DBD1	USR	04	007	332904	1105048	15060103	U	109.0	112.0
A-02-15 29DBD2	USR	04	007	332904	1105048	15060103	U	65.1	68.1
A-02-15 29DBD3	USR	04	007	332904	1105048	15060103	U	39.4	42.4
C-02-01 30AAA	WAT	04	013	331354	1122333	15070101	I	.00	365
C-02-01 30AAA	WAT	04	013	331354	1122333	15070101	I	240 640	640 885
C-02-02 19AAD	WAT	04	013	331437	1122944	15070101	H	301	351
C-03-01 34ACC	WAT	04	013	330725	1122055	15070101	I	272 587	587 906
C-17-07 17CCD	WMD	04	019	315623	1130037	15080102	U	--	--
C-17-07 18D UNSURV	WMD	04	019	315640	1130103	15080102	U	--	--

CODES USED TO IDENTIFY STATE, COUNTY, AND PRIMARY USE OF WATER

State and County

04	Arizona
	001 Apache
	003 Cochise
	007 Gila
	009 Graham
	011 Greenlee
	012 La Paz
	013 Maricopa
	015 Mohave
	019 Pima
	021 Pinal
	023 Santa Cruz
	025 Yavapai
	027 Yuma
06	California
	025 Imperial
	065 Riverside
	071 San Bernardino
32	Nevada
	003 Clark
35	New Mexico
	023 Hidalgo

Primary Use of Water

C	Commerical
F	Fire protection
H	Domestic
I	Irrigation
N	Industiral
P	Public supply
S	Stock
U	Unused

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LOCAL WELL NUMBER	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
AGUA FRIA BASIN										
B-14-01 14ACC	08-26-85	1245	495	7.70	18.0	230	67	15	18	0.5
ALTAR VALLEY										
D-20-08 35BDB	08-26-85	1045	405	7.90	25.5	51	16	2.8	71	4
AVRA VALLEY										
D-15-10 33DBC2	08-26-85	1300	665	7.30	28.0	170	54	7.8	68	2
BIG CHINO VALLEY										
B-21-02 14BCC	08-27-85	1345	615	7.40	24.0	230	59	19	50	1
B-24-08 17DCD1	08-28-85	0830	470	7.50	27.0	210	46	24	19	0.6
BUTLER VALLEY										
B-07-15 02DDC	03-20-85	1015	--	--	--	30	9.6	1.5	110	9
B-07-15 10AAD	02-27-85	1715	670	7.10	24.5	61	19	3.3	120	7
B-08-13 04DDD	04-11-85	1000	450	8.80	29.0	86	23	7.0	65	3
B-08-14 20DAB	04-05-85	1315	419	8.20	27.5	31	11	0.90	68	6
B-08-14 23CCD	04-07-85	1420	575	8.30	28.0	110	27	9.7	73	3
B-08-14 25CBA	04-07-85	1900	1800	8.20	30.0	310	110	7.7	190	5
B-08-14 29CDD	04-05-85	1145	502	10.40	25.0	16	6.4	0.05	94	11
	03-20-85	1515	--	--	--	300	62	36	140	4
COLORADO RIVER, HOOVER DAM TO IMPERIAL DAM										
04N/24E 17H1	03-18-85	--	--	--	18.0	190	71	1.7	390	13
07S/21E 25H1	05-14-85	0830	--	8.06	37.0	450	150	15	1400	30
	05-14-85	0940	--	7.96	39.0	520	180	18	1600	32
	05-14-85	1150	--	7.91	40.0	500	170	15	1500	30
	05-14-85	1430	--	7.84	36.0	520	170	21	1300	27
	10-18-84	1415	--	--	35.0	340	120	9.0	970	24
07S/22E 35C1	05-16-85	0920	--	7.70	24.0	550	130	52	390	7
	05-15-85	1440	--	7.51	25.0	710	180	64	350	6
	05-16-85	0740	--	7.59	25.0	650	170	54	230	4
	05-15-85	1150	--	7.67	26.0	650	170	55	320	6
	10-18-84	1340	--	--	24.0	470	110	48	170	4
	10-18-84	1350	--	--	24.0	560	140	49	220	4
08S/21E 23R1	04-17-85	1240	--	--	23.0	680	200	43	2000	34
	04-23-85	1210	--	7.44	29.0	680	200	43	1500	26
	04-23-85	1505	--	7.50	28.0	930	280	55	2100	32
	04-28-85	1620	--	7.60	27.5	830	250	49	1800	28
	04-24-85	1030	--	7.66	27.0	900	270	55	1900	29
	04-24-85	1150	--	--	27.0	700	210	43	1600	27
08S/22E 17N1	04-25-85	1402	--	7.51	25.0	1100	290	85	2800	38
	04-25-85	1422	--	7.36	26.0	1600	450	120	3500	39
	04-25-85	1620	--	7.47	27.0	1600	460	100	3000	34
	04-25-85	1000	--	7.55	26.0	1000	290	73	2700	38
	10-17-84	1702	--	--	23.5	200	55	15	670	22
09N/22E 01F1	03-21-85	1047	--	--	--	270	61	29	120	3
09S/21E 25D1	04-16-85	0920	--	--	24.0	350	75	40	1800	44
	04-16-85	1412	--	--	23.0	580	120	67	2400	44
	04-17-85	0832	--	--	23.0	720	160	79	2800	46
09S/21E 25D1	04-17-85	0937	--	--	24.0	650	120	85	2900	51
	10-17-84	1740	--	--	25.0	290	75	24	1000	26
	10-17-84	1729	--	--	25.0	430	70	61	2300	50
B-03-19 29ABA	08-26-85	1435	418	8.00	28.0	120	37	6.8	39	2
B-04-19 29BCB	08-27-85	1055	752	7.80	35.0	200	64	9.4	79	3
B-05-19 32AAC	08-26-85	1705	613	7.20	27.5	290	100	10	24	0.6
B-24-18 30CCD	08-29-85	1615	2550	7.10	24.0	1300	270	140	140	2
B-25-20 15AAA	08-29-85	1130	340	8.00	28.0	82	20	7.7	39	2
B-26-19 35DDD	08-29-85	1000	535	7.90	26.5	150	28	19	52	2
B-27-21 25BAA	08-29-85	1445	485	8.00	27.0	100	24	9.9	55	2
S33 E66 17AAB	03-20-85	--	--	--	27.0	290	87	18	78	2
10N/22E 22B1	03-21-85	0930	--	--	--	290	63	32	160	4
B-17-21 05BCC3	03-21-85	1300	--	--	--	620	150	58	390	7
B-17-22 03BBC	03-21-85	1430	--	--	22.0	620	160	53	270	5
CONCHO										
A-12-26 19ABA	04-25-85	0900	175	8.20	14.5	70	14	8.4	7.4	0.4
DOUGLAS BASIN										
D-19-26 04AAA	09-06-85	0845	300	7.70	23.0	82	29	2.3	34	2
D-20-26 25CBC	09-05-85	1515	825	7.60	22.5	310	85	24	48	1
D-23-27 09DAB	09-05-85	1645	370	8.40	27.5	12	4.5	0.14	81	11

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
AGUA FRIA BASIN										
B-14-01 14ACC	1.0	148	88	9.0	0.10	24	--	310	1.50	<0.010
ALTAR VALLEY										
D-20-08 35BDB	2.1	139	27	10	3.0	29	--	240	0.540	0.020
AVRA VALLEY										
D-15-10 33DBC2	2.3	165	53	59	1.1	29	--	370	7.60	<0.010
BIG CHINO VALLEY										
B-21-02 14BCC	1.6	172	89	30	0.40	17	--	370	2.70	<0.010
B-24-08 17DCD1	2.8	221	7.3	14	0.50	20	--	270	1.60	<0.010
BUTLER VALLEY										
B-07-15 02DDC	3.0	--	57	49	5.0	18	--	310	4.40	<0.010
B-07-15 10AAD	4.7	190	45	49	7.6	20	--	380	1.80	0.230
B-08-13 04DDD	3.7	174	18	31	<0.10	14	--	270	<0.100	0.020
B-08-14 20DAB	1.8	97	15	24	9.3	15	--	200	3.60	0.010
B-08-14 23CCD	4.3	105	0.8	120	0.50	4.8	--	300	<0.100	<0.010
B-08-14 25CBA	9.1	46	310	320	0.50	4.3	--	980	<0.100	<0.010
B-08-14 29CDD	3.8	110	65	30	5.9	8.5	--	280	<0.100	0.020
	10	--	200	210	0.80	35	--	--	2.20	--
COLORADO RIVER, HOOVER DAM TO IMPERIAL DAM										
04N/24E 17H1	1.7	--	340	450	2.3	39	--	--	5.00	--
07S/21E 25H1	10	--	800	1800	--	--	4240	4400	--	--
	12	--	1100	2100	--	--	5120	5200	--	--
	12	--	940	2100	--	--	4710	4900	--	--
	11	--	790	1700	--	--	4130	4400	--	--
	13	--	550	1300	--	--	3060	3300	--	--
07S/22E 35C1	8.0	--	670	270	--	--	1700	1900	--	--
	7.0	--	680	380	--	--	1820	1900	--	--
	5.0	--	320	410	--	--	1310	1500	--	--
	7.0	--	520	450	--	--	1660	1800	--	--
	7.0	--	500	160	--	--	1030	1200	--	--
	5.0	--	520	170	--	--	1270	1400	--	--
08S/21E 23R1	16	--	1400	2400	--	--	6170	6300	--	--
	14	--	880	2100	--	--	4860	5200	--	--
	16	--	1400	3000	--	--	7000	7200	--	--
	14	--	1200	2500	--	--	5850	6100	--	--
	15	--	1500	2500	--	--	6390	6500	--	--
	14	--	840	2200	--	--	4930	5400	--	--
08S/22E 17N1	20	--	2500	3100	--	--	8990	9600	--	--
	23	--	2700	4100	--	--	11100	11000	--	--
	22	--	2500	3500	--	--	9740	10000	--	--
	16	--	2200	3100	--	--	8500	8800	--	--
	8.0	--	790	280	--	--	2060	2300	--	--
09N/22E 01F1	6.8	--	190	140	0.60	34	--	--	0.180	--
09S/21E 25D1	8.0	--	1500	1400	--	--	5200	5400	--	--
	11	--	1900	2200	--	--	7060	7500	--	--
	12	--	2200	2600	--	--	8190	8500	--	--
09S/21E 25D1	13	--	2400	3000	--	--	8790	9100	--	--
	7.0	--	1300	460	--	--	3160	3500	--	--
	14	--	2200	1800	--	--	6830	7300	--	--
B-03-19 29ABA	2.6	1220	29	25	0.10	27	--	900	3.20	<0.010
B-04-19 29BCB	4.1	170	130	44	0.70	38	--	470	1.70	<0.010
B-05-19 32AAC	6.1	328	22	9.9	0.10	40	--	410	1.90	<0.010
B-24-18 30CCD	5.1	300	820	370	0.50	22	--	2000	<0.100	0.010
B-25-20 15AAA	3.2	120	15	13	0.60	33	--	200	5.10	<0.010
B-26-19 35DDD	5.4	139	49	46	0.60	48	--	330	3.20	<0.010
B-27-21 25BAA	3.8	109	42	36	1.1	29	--	270	4.00	<0.010
S33 E66 17AAB	3.7	--	93	180	1.8	34	--	--	5.60	--
10N/22E 22B1	5.6	--	180	270	0.50	30	--	--	0.130	--
B-17-21 05BCC3	5.6	--	300	800	0.40	28	--	--	0.250	--
B-17-22 03BBC	12	--	700	340	0.30	27	--	--	<0.100	--
CONCHO										
A-12-26 19ABA	2.8	76	3.8	3.0	<0.10	29	--	110	0.390	0.070
DOUGLAS BASIN										
D-19-26 04AAA	2.1	120	20	8.0	2.9	31	--	200	1.40	0.010
D-20-26 25CBC	3.6	198	120	56	1.4	35	--	490	7.40	<0.010
D-23-27 09DAB	1.3	136	27	9.5	0.40	24	--	230	1.70	<0.010

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
AGUA FRIA BASIN										
B-14-01 14ACC	--	--	--	--	--	20	--	--	--	--
ALTAR VALLEY										
D-20-08 35BDB	0.06	--	--	--	--	130	--	--	--	--
AVRA VALLEY										
D-15-10 33DBC2	--	--	--	--	--	100	--	--	--	--
BIG CHINO VALLEY										
B-21-02 14BCC	--	--	7	49	<0.5	140	<1	<1	<3	<10
B-24-08 17DCD1	--	--	41	610	<0.5	110	<1	<1	<3	10
BUTLER VALLEY										
B-07-15 02DDC	--	--	7	--	--	210	--	10	--	--
B-07-15 10AAD	0.71	--	5	--	--	310	--	<1	--	--
B-08-13 04DDD	0.06	--	<1	--	--	100	--	<1	--	--
B-08-14 20DAB	0.03	--	24	--	--	170	--	<1	--	--
B-08-14 23CCD	--	--	<1	--	--	100	--	<1	--	--
B-08-14 25CBA	--	--	<1	--	--	160	--	<1	--	--
B-08-14 29CDD	0.06	--	13	--	--	770	--	<1	--	--
	--	<10	3	38	--	200	<1	<1	--	--
COLORADO RIVER, HOOVER DAM TO IMPERIAL DAM										
04N/24E 17H1	--	20	52	<100	--	1000	<1	10	--	--
07S/21E 25H1	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
07S/22E 35C1	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
08S/21E 23R1	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
08S/22E 17N1	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
09N/22E 01F1	--	<10	3	33	--	130	<1	<1	--	--
09S/21E 25D1	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
09S/21E 25D1	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
B-03-19 29ABA	--	--	4	140	<0.5	80	<1	<1	<3	<10
B-04-19 29BCB	--	--	1	32	<0.5	250	<1	<1	<3	10
B-05-19 32AAC	--	--	2	300	<0.5	200	<1	<1	<3	20
B-24-18 30CCD	0.03	--	4	37	<2	170	<3	<1	<9	<30
B-25-20 15AAA	--	--	4	44	<0.5	70	<1	7	<3	30
B-26-19 35DDD	--	--	3	9	<0.5	160	<1	<1	<3	20
B-27-21 25BAA	--	--	10	82	<0.5	140	<1	4	<3	10
S33 E66 17AAB	--	10	<1	33	--	160	<1	<1	--	--
10N/22E 22B1	--	30	4	47	--	140	<1	<1	--	--
B-17-21 05BCC3	--	<10	5	<100	--	300	<1	<1	--	--
B-17-22 03BBC	--	50	3	<100	--	220	3	<1	--	--
CONCHO										
A-12-26 19ABA	0.21	--	--	--	--	10	--	--	--	--
DOUGLAS BASIN										
D-19-26 04AAA	0.03	--	--	--	--	50	--	--	--	--
D-20-26 25CBC	--	--	--	--	--	60	--	--	--	--
D-23-27 09DAB	--	--	--	--	--	90	--	--	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
AGUA FRIA BASIN									
B-14-01 14ACC	7	--	--	1	--	--	--	--	--
ALTAR VALLEY									
D-20-08 35BDB	60	--	--	5	--	--	--	--	--
AVRA VALLEY									
D-15-10 33DBC2	9	--	--	5	--	--	--	--	--
BIG CHINO VALLEY									
B-21-02 14BCC	8	<10	24	6	<10	--	150	12	13
B-24-08 17DCD1	4	<10	18	2	<10	--	360	<6	6
BUTLER VALLEY									
B-07-15 02DDC	9	--	--	3	--	--	--	--	--
B-07-15 10AAD	19	--	--	330	--	--	--	--	--
B-08-13 04DDD	18	--	--	10	--	--	--	--	--
B-08-14 20DAB	68	--	--	10	--	--	--	--	--
B-08-14 23CCD	54	--	--	190	--	--	--	--	--
B-08-14 25CBA	100	--	--	62	--	--	--	--	--
B-08-14 29CDD	23	--	--	<1	--	--	--	--	--
	<3	<5	48	<1	--	2	1100	--	--
COLORADO RIVER, HOOVER DAM TO IMPERIAL DAM									
04N/24E 17H1	60	<5	90	<10	--	11	3000	--	--
07S/21E 25H1	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
07S/22E 35C1	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
08S/21E 23R1	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
08S/22E 17N1	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
09N/22E 01F1	5	<5	46	2	--	<1	990	--	--
09S/21E 25D1	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
09S/21E 25D1	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
B-03-19 29ABA	<3	<10	28	4	<10	--	740	12	63
B-04-19 29BCB	10	<10	40	5	20	--	960	<6	170
B-05-19 32AAC	20	<10	20	1	<10	--	670	7	69
B-24-18 30CCD	8000	40	120	820	<30	--	2200	<18	1800
B-25-20 15AAA	9	<10	20	1	<10	--	130	14	120
B-26-19 35DDD	7	<10	18	2	<10	--	230	20	21
B-27-21 25BAA	12	<10	51	3	<10	--	320	14	48
S33 E66 17AAB	170	<5	47	6	--	2	1300	--	--
10N/22E 22B1	20	<5	46	33	--	<1	1400	--	--
B-17-21 05BCC3	30	<5	200	<10	--	<1	2400	--	--
B-17-22 03BBC	80	22	70	50	--	<1	2800	--	--
CONCHO									
A-12-26 19ABA	17	--	--	<1	--	--	--	--	--
DOUGLAS BASIN									
D-19-26 04AAA	<3	--	--	<1	--	--	--	--	--
D-20-26 25CBC	7	--	--	1	--	--	--	--	--
D-23-27 09DAB	<3	--	--	<1	--	--	--	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
DUNCAN BASIN										
D-05-30 35CDD	07-23-85	1200	276	7.90	22.0	71	20	5.1	28	2
D-06-31 17DCD	07-23-85	1300	480	8.00	23.0	61	19	3.3	86	5
D-07-30 05DBC	07-23-85	1030	720	7.60	22.0	350	90	31	27	0.6
D-07-31 04ACC	07-22-85	1130	1100	7.40	17.5	300	91	18	110	3
D-07-31 21DDB	07-22-85	1300	650	7.30	18.0	250	79	13	41	1
D-08-32 19AAD	07-23-85	1420	2790	7.00	19.5	640	180	47	450	8
D-08-32 34DCC	07-22-85	1610	585	7.00	17.0	160	49	9.6	61	2
D-09-31 02AAA	07-23-85	1530	1250	7.90	33.0	86	18	10	250	12
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN										
A-01-15 15DAB	08-05-85	1115	725	7.10	19.5	280	84	17	43	1
A-01-15 21ABC	08-05-85	1000	470	7.50	20.0	170	56	7.9	34	1
D-01-16 29AC UNSURV	08-05-85	1245	735	7.10	16.0	300	80	23	48	1
D-04-14 06CDC	08-06-85	0900	3250	7.20	21.0	890	240	70	340	5
D-04-14 16CBB	08-06-85	1015	520	7.50	27.5	160	35	17	42	1
D-04-16 16ADC	08-06-85	1230	892	7.40	23.0	400	86	44	42	0.9
D-05-15 24BAA3	08-05-85	1615	1670	7.40	18.5	460	130	32	160	3
GILA RIVER FROM TEXAS HILL TO DOME										
C-16-06 22CBB	01-18-85	1200	--	7.60	11.0	12	3.4	0.80	72	9
HARQUAHALA PLAINS										
B-03-11 36BBB	08-13-85	1305	1030	7.90	30.0	90	18	11	190	9
C-01-08 08BBB	08-13-85	1035	1390	8.20	32.5	79	15	10	260	13
LOWER HASSAYAMPA										
B-01-05 16BBB	07-30-85	1207	592	7.90	24.5	110	32	7.0	94	4
B-02-06 20DAA	07-30-85	1020	889	8.04	27.0	100	33	4.3	140	6
C-01-06 27BBC	07-30-85	1425	2320	8.00	27.5	130	30	14	450	18
LITTLE CHINO VALLEY										
B-16-02 03DDC4	08-27-85	0845	710	7.60	15.0	280	66	28	44	1
B-17-02S34BBA	08-27-85	1000	--	7.80	19.0	130	36	9.0	13	0.5
LOWER SANTA CRUZ BASIN										
D-04-09 04DDD	07-29-85	1345	1080	7.40	22.5	280	81	18	120	3
D-05-03 16CCC1	08-07-85	1115	3990	7.20	25.0	1100	250	120	490	7
D-05-03 16CCC2	08-07-85	1015	500	8.00	29.0	31	7.6	2.9	91	7
D-05-07 24CDA	08-07-85	0815	1840	8.60	44.5	43	16	0.60	340	24
D-06-03 35DDC	07-31-85	1325	1090	8.20	29.0	59	13	6.4	220	13
D-06-04 04DDD2	07-31-85	1035	830	7.80	28.0	200	65	10	91	3
D-06-04 04DDD3	08-05-85	1010	1310	7.60	24.0	410	130	21	110	2
D-06-07 15ADC2	08-05-85	1225	1100	9.00	53.0	--	4.1	<0.01	210	--
D-07-04W01DAD	08-05-85	1715	501	8.40	31.5	28	7.9	2.1	100	8
D-07-06 29CDD	08-05-85	1500	3670	7.30	23.0	1100	370	52	410	6
D-07-06 34CDD	08-08-85	0740	915	7.80	28.0	190	62	9.0	130	4
D-09-07 02CDD	08-07-85	1410	944	7.60	26.0	280	91	14	76	2
D-09-07 03ADD	08-07-85	1250	569	7.80	27.0	130	42	5.6	62	2
D-10-09 10AAD2	08-07-85	1023	685	7.70	27.0	210	69	9.4	64	2
D-10-10 05DAB	08-07-85	0840	573	7.70	27.0	190	60	8.8	52	2
D-11-11 35DDD	07-10-85	1800	940	7.30	24.0	350	110	17	63	2
NEW RIVER-CAVE CREEK										
A-04-02 11ADB	07-30-85	1215	438	7.60	28.0	150	33	17	42	2
A-04-02 16ABB	06-28-85	0730	760	8.80	36.5	--	--	--	--	--
A-05-02 03DBC	07-31-85	1130	505	7.70	31.0	80	16	9.7	84	4
A-06-04 26DCC	07-31-85	0945	430	7.80	25.5	150	28	20	37	1
PUERCO-ZUNI										
A-14-29 35CDC2	04-25-85	1830	1850	6.80	19.0	660	200	40	130	2
PEACH SPRING CANYON										
B-25-11 02CBC	08-28-85	1015	760	7.50	20.0	310	64	36	20	0.5
B-26-14 25ACB	08-28-85	1200	650	7.20	17.5	320	93	22	7.6	0.2
RANEGRAS PLAIN										
B-03-15 02DDB	08-13-85	1530	1000	9.00	30.5	20	7.3	0.40	210	22
B-04-14 04AAC	08-14-85	1430	475	8.60	31.0	12	3.9	0.40	97	13
B-04-16 13DBB	08-14-85	1145	786	8.50	26.0	59	16	4.7	140	8
B-05-15 04BDD	08-13-85	1555	1510	7.90	30.5	200	63	11	260	8
B-05-15 20DDD2	08-14-85	0930	3870	7.90	29.0	400	130	18	620	14
B-05-16 09BCC	08-14-85	1608	1390	8.00	29.0	140	44	6.6	220	9
B-06-16 08CDA	08-14-85	1310	3230	7.80	26.5	570	180	30	410	8
B-06-16 23DDC	08-14-85	1100	3990	7.70	27.0	590	170	39	610	11

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
DUNCAN BASIN										
D-05-30 35CDD	2.3	117	12	6.5	0.50	22	--	170	0.800	<0.010
D-06-31 17DCD	4.0	99	110	26	1.3	38	--	350	0.630	<0.010
D-07-30 05DBC	1.4	322	34	9.7	0.50	72	--	460	7.60	<0.010
D-07-31 04ACC	3.3	203	200	67	2.0	45	--	660	3.30	0.030
D-07-31 21DDB	3.0	207	84	25	1.1	41	--	410	2.80	0.010
D-08-32 19AAD	4.2	--	680	210	2.6	61	--	1900	9.80	0.030
D-08-32 34DCC	2.6	202	57	12	2.0	37	--	350	0.970	0.050
D-09-31 02AAA	7.8	--	220	95	6.1	68	--	810	1.10	<0.010
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN										
A-01-15 15DAB	2.9	199	79	48	0.30	29	--	420	7.50	0.130
A-01-15 21ABC	3.8	173	46	14	0.30	34	--	300	0.730	<0.010
D-01-16 29AC UNSURV	0.90	239	150	21	0.60	25	--	490	0.300	0.020
D-04-14 06CDC	7.4	301	610	560	1.2	42	--	2100	10.0	<0.010
D-04-14 16CBB	5.6	206	17	20	0.40	31	--	290	3.20	<0.010
D-04-16 16ADC	4.2	351	120	17	0.50	44	--	570	0.890	<0.010
D-05-15 24BAA3	6.4	209	370	200	0.90	30	--	1100	2.70	0.020
GILA RIVER FROM TEXAS HILL TO DOME										
C-16-06 22CBB	0.90	--	53	22	0.20	96	--	290	--	--
HARQUAHALA PLAINS										
B-03-11 36BBB	4.0	288	120	81	2.6	30	--	630	2.00	0.010
C-01-08 08BBB	3.5	213	150	220	5.3	34	--	830	4.30	<0.010
LOWER HASSAYAMPA										
B-01-05 16BBB	2.3	141	81	34	2.0	21	--	360	3.90	<0.010
B-02-06 20DAA	3.1	107	120	100	0.90	22	--	490	5.60	0.020
C-01-06 27BBC	3.1	183	360	380	5.2	37	--	1400	5.40	<0.010
LITTLE CHINO VALLEY										
B-16-02 03DDC4	2.2	293	26	29	0.30	34	--	410	6.00	<0.010
B-17-02S34BBA	1.6	115	9.3	18	0.30	32	--	190	1.70	<0.010
LOWER SANTA CRUZ BASIN										
D-04-09 04DDD	4.7	154	100	190	0.70	31	--	640	2.60	<0.010
D-05-03 16CCC1	8.0	293	970	670	0.90	31	--	2700	9.90	<0.010
D-05-03 16CCC2	2.0	124	70	31	3.9	18	--	300	2.00	<0.010
D-05-07 24CDA	2.0	47	240	370	3.9	26	--	1000	1.20	<0.010
D-06-03 35DDC	2.4	210	120	110	3.3	33	--	630	3.90	<0.010
D-06-04 04DDD2	2.6	120	110	100	0.40	26	--	480	6.30	<0.010
D-06-04 04DDD3	3.1	124	240	180	0.30	32	--	790	14.0	<0.010
D-06-07 15ADC2	1.4	76	130	190	4.2	33	--	--	1.30	0.010
D-07-04W01DAD	1.2	140	60	30	1.4	25	--	310	2.20	<0.010
D-07-06 29CDD	6.4	272	980	490	0.30	39	--	2500	35.0	<0.010
D-07-06 34CDD	3.1	117	150	110	0.60	32	--	570	9.60	<0.010
D-09-07 02CDD	3.3	136	120	83	0.40	31	--	500	25.0	0.010
D-09-07 03ADD	2.7	141	63	34	0.50	31	--	330	6.20	<0.010
D-10-09 10AAD2	2.4	173	85	40	0.70	33	--	410	6.60	<0.010
D-10-10 05DAB	2.4	155	95	26	0.40	31	--	370	3.10	<0.010
D-11-11 35DDD	2.7	199	140	76	0.30	37	--	570	8.60	<0.010
NEW RIVER-CAVE CREEK										
A-04-02 11ADB	2.9	180	9.7	13	1.0	42	--	270	4.50	<0.010
A-04-02 16ABB	--	166	--	--	--	--	--	--	--	--
A-05-02 03DBC	3.7	203	17	16	3.5	51	--	320	3.50	<0.010
A-06-04 26DCC	3.3	172	15	20	1.0	42	--	270	4.10	0.010
PUERCO-ZUNI										
A-14-29 35CDC2	20	512	300	120	3.1	10	--	1100	<0.100	<0.010
PEACH SPRING CANYON										
B-25-11 02CBC	1.5	218	25	41	0.20	18	--	340	8.60	<0.010
B-26-14 25ACB	2.0	271	23	25	0.20	30	--	370	1.70	<0.010
RANEGRAS PLAIN										
B-03-15 02DDB	0.80	50	140	180	21	18	--	610	5.80	0.010
B-04-14 04AAC	2.1	121	43	33	0.80	15	--	270	2.00	<0.010
B-04-16 13DBB	1.9	92	100	100	4.2	33	--	460	4.60	<0.010
B-05-15 04BDD	5.3	105	350	220	4.5	32	--	1000	4.10	<0.010
B-05-15 20DDD2	6.2	83	800	730	5.5	53	--	2400	6.00	<0.010
B-05-16 09BCC	2.3	73	230	240	4.7	31	--	820	4.90	<0.010
B-06-16 08CDA	7.9	71	830	490	3.3	30	--	2000	9.10	<0.010
B-06-16 23DDC	8.2	106	1200	580	4.9	37	--	2700	14.0	<0.010

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
DUNCAN BASIN										
D-05-30 35CDD	--	--	3	13	<0.5	20	<1	7	<3	20
D-06-31 17DCD	--	--	4	--	--	70	--	18	--	--
D-07-30 05DBC	--	--	<1	20	<0.5	50	<1	<1	<3	20
D-07-31 04ACC	0.09	--	5	53	<0.5	80	<1	<1	<3	10
D-07-31 21DDB	0.03	--	<1	--	--	70	--	<1	--	--
D-08-32 19AAD	0.09	--	4	43	<2	430	<3	<1	<9	40
D-08-32 34DCC	0.15	--	2	27	<0.5	50	<1	<1	<3	<10
D-09-31 02AAA	--	--	11	13	<0.5	440	<1	1	<3	<10
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN										
A-01-15 15DAB	0.40	--	3	48	<0.5	130	<1	<1	<3	10
A-01-15 21ABC	--	--	<1	18	<0.5	40	<1	<1	<3	10
D-01-16 29AC UNSURV	0.06	--	<1	130	<0.5	20	<1	<1	<3	20
D-04-14 06CDC	--	--	4	71	<0.5	380	<1	<1	<3	20
D-04-14 16CBB	--	--	1	220	<0.5	90	<1	<1	<3	1
D-04-16 16ADC	--	--	1	53	<0.5	100	<1	<1	<3	10
D-05-15 24BAA3	0.06	--	3	38	<0.5	190	<1	<1	<3	<10
GILA RIVER FROM TEXAS HILL TO DOME										
C-16-06 22CBB	--	--	--	--	--	60	--	--	--	--
HARQUAHALA PLAINS										
B-03-11 36BBB	0.03	--	--	--	--	510	--	--	--	--
C-01-08 08BBB	--	--	--	--	--	560	--	--	--	--
LOWER HASSAYAMPA										
B-01-05 16BBB	--	--	--	--	--	180	--	7	--	--
B-02-06 20DAA	0.06	--	--	--	--	340	--	23	--	--
C-01-06 27BBC	--	--	--	--	--	980	--	31	--	--
LITTLE CHINO VALLEY										
B-16-02 03DDC4	--	--	--	--	--	180	--	--	--	--
B-17-02S34BBA	--	--	--	--	--	40	--	--	--	--
LOWER SANTA CRUZ BASIN										
D-04-09 04DDD	--	--	--	--	--	70	--	1	--	--
D-05-03 16CCC1	--	--	--	--	--	3000	--	--	--	--
D-05-03 16CCC2	--	--	--	--	--	180	--	--	--	--
D-05-07 24CDA	--	--	22	33	<0.5	640	<1	<1	<3	20
D-06-03 35DDC	--	--	--	--	--	330	--	14	--	--
D-06-04 04DDD2	--	--	7	89	<0.5	90	<1	5	<3	<10
D-06-04 04DDD3	--	--	3	64	<0.5	220	<1	<1	<3	10
D-06-07 15ADC2	0.03	--	--	--	--	510	--	--	--	--
D-07-04W01DAD	--	--	--	--	--	210	--	--	--	--
D-07-06 29CDD	--	--	3	39	<0.5	1500	<1	<1	<3	20
D-07-06 34CDD	--	--	--	--	--	180	--	--	--	--
D-09-07 02CDD	0.03	--	--	--	--	80	--	--	--	--
D-09-07 03ADD	--	--	--	--	--	90	--	--	--	--
D-10-09 10AAD2	--	--	--	--	--	80	--	--	--	--
D-10-10 05DAB	--	--	--	--	--	120	--	--	--	--
D-11-11 35DDD	--	--	3	120	<0.5	50	<1	<1	<3	<10
NEW RIVER-CAVE CREEK										
A-04-02 11ADB	--	--	--	--	--	50	--	1	--	--
A-04-02 16ABB	--	--	--	--	--	--	--	--	--	--
A-05-02 03DBC	--	--	--	--	--	90	--	1	--	--
A-06-04 26DCC	0.03	--	5	--	--	50	--	1	--	--
PUERCO-ZUNI										
A-14-29 35CDC2	--	--	--	--	--	480	--	--	--	--
PEACH SPRING CANYON										
B-25-11 02CBC	--	--	5	59	<0.5	80	<1	<1	<3	<10
B-26-14 25ACB	--	--	1	26	<0.5	40	<1	<1	<3	<10
RANEGRAS PLAIN										
B-03-15 02DDB	0.03	--	70	3	<0.5	740	<1	55	<3	<10
B-04-14 04AAC	--	--	16	7	<0.5	310	<1	16	<3	<10
B-04-16 13DBB	--	--	33	22	<0.5	510	<1	54	<3	<10
B-05-15 04BDD	--	--	10	--	--	1100	--	29	--	--
B-05-15 20DDD2	--	--	16	56	<2	1200	3	50	<9	<30
B-05-16 09BCC	--	--	36	--	--	720	--	45	--	--
B-06-16 08CDA	--	--	8	--	--	1200	--	53	--	--
B-06-16 23DDC	--	--	12	--	--	3600	--	42	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
DUNCAN BASIN									
D-05-30 35CDD	<3	<10	15	5	<10	--	110	14	56
D-06-31 17DCD	6	--	--	<1	--	--	--	--	--
D-07-30 05DBC	54	<10	15	2	<10	--	280	11	210
D-07-31 04ACC	<3	<10	54	5	<10	--	540	16	12
D-07-31 21DDB	39	--	--	4	--	--	--	--	--
D-08-32 19AAD	<9	<30	130	<3	<30	--	1400	<18	31
D-08-32 34DCC	<3	<10	25	2	<10	--	210	<6	11
D-09-31 02AAA	110	<10	120	8	40	--	190	40	49
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN									
A-01-15 15DAB	8	<10	19	22	<10	--	290	<6	9
A-01-15 21ABC	<3	<10	32	<1	10	--	840	<6	9
D-01-16 29AC UNSURV	57	<10	9	9	<10	--	570	<6	61
D-04-14 06CDC	13	<10	200	31	10	--	1900	6	20
D-04-14 16CBB	19	<10	79	13	<10	--	550	<6	190
D-04-16 16ADC	14	<10	31	21	<10	--	600	14	17
D-05-15 24BAA3	<3	<10	130	6	<10	--	940	6	9
GILA RIVER FROM TEXAS HILL TO DOME									
C-16-06 22CBB	2700	--	--	2	--	--	--	--	--
HARQUAHALA PLAINS									
B-03-11 36BBB	5	--	--	1	--	--	--	--	--
C-01-08 08BBB	9	--	--	2	--	--	--	--	--
LOWER HASSAYAMPA									
B-01-05 16BBB	<3	--	--	<1	--	--	--	--	--
B-02-06 20DAA	11	--	--	5	--	--	--	--	--
C-01-06 27BBC	40	--	--	<10	--	--	--	--	--
LITTLE CHINO VALLEY									
B-16-02 03DDC4	<3	--	--	2	--	--	--	--	--
B-17-02S34BBA	<3	--	--	<1	--	--	--	--	--
LOWER SANTA CRUZ BASIN									
D-04-09 04DDD	7	--	--	4	--	--	--	--	--
D-05-03 16CCC1	70	--	--	20	--	--	--	--	--
D-05-03 16CCC2	4	--	--	<1	--	--	--	--	--
D-05-07 24CDA	6	<10	370	6	70	--	340	44	20
D-06-03 35DDC	--	--	--	3	--	--	--	--	--
D-06-04 04DDD2	<3	<10	49	2	<10	--	980	10	9
D-06-04 04DDD3	24	<10	63	21	<10	--	1500	7	29
D-06-07 15ADC2	3	--	--	<1	--	--	--	--	--
D-07-04W01DAD	<3	--	--	<1	--	--	--	--	--
D-07-06 29CDD	<3	<10	130	3	<10	--	3100	<6	12
D-07-06 34CDD	7	--	--	2	--	--	--	--	--
D-09-07 02CDD	<3	--	--	<1	--	--	--	--	--
D-09-07 03ADD	<3	--	--	<1	--	--	--	--	--
D-10-09 10AAD2	<3	--	--	3	--	--	--	--	--
D-10-10 05DAB	<3	--	--	<1	--	--	--	--	--
D-11-11 35DDD	3	<10	40	<1	<10	--	930	<6	7
NEW RIVER-CAVE CREEK									
A-04-02 11ADB	6	--	--	8	--	--	--	--	--
A-04-02 16ABB	--	--	--	--	--	--	--	--	--
A-05-02 03DBC	4	--	--	<1	--	--	--	--	--
A-06-04 26DCC	<3	--	--	2	--	--	--	--	--
PUERCO-ZUNI									
A-14-29 35CDC2	660	--	--	24	--	--	--	--	--
PEACH SPRING CANYON									
B-25-11 02CBC	<3	<10	13	3	<10	--	200	<6	10
B-26-14 25ACB	<3	10	8	1	<10	--	340	<6	130
RANEGRAS PLAIN									
B-03-15 02DDB	31	<10	45	<1	<10	--	36	78	19
B-04-14 04AAC	43	<10	10	<1	<10	--	220	48	10
B-04-16 13DBB	15	<10	52	3	<10	--	140	44	22
B-05-15 04BDD	17	--	--	<1	--	--	--	--	--
B-05-15 20DDD2	<9	<30	160	<3	<30	--	3200	37	43
B-05-16 09BCC	5	--	--	2	--	--	--	--	--
B-06-16 08CDA	60	--	--	10	--	--	--	--	--
B-06-16 23DDC	50	--	--	10	--	--	--	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
SAFFORD BASIN										
D-04-23 19BCB2	07-18-85	1630	1080	7.20	19.0	130	43	6.5	79	3
D-04-23 22CAB	07-18-85	1515	4080	7.20	27.0	270	94	7.8	720	20
D-05-23 02CBB	07-18-85	1400	970	7.10	18.5	100	32	5.7	17	0.8
D-05-24 31ACC	07-17-85	1347	6800	--	20.5	700	180	61	1200	20
D-06-24 04ADD	07-17-85	1135	1330	--	16.0	140	36	11	210	8
D-06-24 10ACB	07-18-85	1300	3020	7.60	18.5	380	72	48	500	11
D-06-24 12ADC2	07-17-85	1030	4800	--	18.0	710	200	51	800	14
D-06-25 05DBA	07-17-85	0900	2920	--	--	240	55	25	490	14
D-06-25 17AAA2	07-16-85	1535	5100	--	20.5	470	110	48	950	20
D-06-25 23BBAA	07-19-85	0830	4900	7.80	39.0	110	36	5.0	1100	48
D-06-25 35DBD	07-16-85	1400	4000	--	18.5	890	250	63	570	9
D-06-25 36CBB	07-16-85	1300	12000	--	46.5	330	120	7.1	2500	63
D-06-28 31DAB2	07-18-85	1300	810	7.60	17.0	210	64	13	89	3
D-07-23 01DBD2	07-17-85	1505	2000	--	23.0	6	1.9	0.20	410	79
D-07-24 04CCC2	07-17-85	1615	362	--	21.0	13	4.5	0.40	76	10
D-07-25 03CCB1	07-18-85	1100	2390	7.50	18.5	410	70	58	370	8
D-07-26 06ADD	07-16-85	1330	1050	7.40	19.0	150	44	9.8	160	6
D-07-26 15BCC	07-16-85	1700	3790	7.40	19.5	420	120	29	720	16
D-07-26 18AAB	07-16-85	1515	3900	7.10	21.5	920	280	53	530	8
D-07-26 21ADD	07-17-85	1030	9200	7.40	20.0	200	55	14	500	16
D-07-26 24ABA	07-17-85	1645	2130	7.20	19.5	390	110	28	340	8
D-07-26 28ACB3	07-17-85	0830	6850	7.10	19.5	1200	310	98	1100	14
D-07-27 02AAB2	07-18-85	1100	1670	8.70	34.0	17	5.6	0.60	340	38
D-07-27 08DBC2	07-18-85	1500	2060	7.20	20.0	350	100	25	270	6
D-07-27 16CCC	07-18-85	0815	1760	7.40	21.5	260	77	17	280	8
D-08-26 06AAC1	07-17-85	1245	2980	7.60	22.5	420	130	23	440	10
D-08-26 07BAA2	07-17-85	--	4990	8.50	42.0	170	61	3.0	970	35
D-08-26 07DBD	07-23-85	1330	3880	8.70	42.0	100	40	0.60	740	34
D-08-26 15DCB2	07-23-85	0945	3220	6.90	20.5	760	230	44	380	6
D-08-26 15DCB4	07-23-85	0830	2800	7.00	21.0	720	210	46	350	6
D-08-26 17DDD	07-19-85	0815	1280	8.60	28.0	27	6.8	2.2	250	22
D-08-26 28ABC	07-23-85	1130	3400	8.80	34.5	740	220	47	360	6
D-09-26 06BDA1	07-23-85	1530	1130	8.80	31.0	14	5.4	0.12	210	26
D-09-26 18DDA	07-23-85	1715	323	7.30	22.0	100	30	7.3	20	0.9
SAN BERNARDINO VALLEY										
D-24-30 11CAD1	03-02-85	0850	398	8.00	30.0	92	17	12	67	3
D-24-30 14BDB	03-02-85	1000	411	7.90	29.0	130	24	16	53	2
D-24-30 15CDC1	03-01-85	1614	500	7.70	19.0	180	23	30	46	2
D-24-30 15DAD	03-02-85	1100	495	8.40	32.0	26	5.4	2.9	110	10
D-24-30 15DDC	03-02-85	1130	431	8.30	32.5	62	11	8.4	78	4
D-24-30 23BAB1	03-02-85	1330	425	8.10	28.0	110	24	11	62	3
SALT RIVER VALLEY										
A-01-02 01BDB	06-24-85	1400	1680	7.50	27.0	370	76	43	210	5
A-01-02 01CAC	06-19-85	1100	2290	7.20	25.5	510	120	51	300	6
A-01-03 15ABC	06-27-85	0700	1440	7.40	24.0	290	72	27	200	5
A-01-03 21ACC	06-25-85	0700	895	8.50	27.0	71	16	7.6	160	8
A-01-04 02DDB	08-23-85	1315	1230	7.80	28.5	280	45	40	130	3
A-01-06 04DDC	09-05-85	0800	1770	7.50	24.0	350	90	30	220	5
A-02-01 04BBA2	07-03-85	0700	1570	7.30	24.0	640	160	58	67	1
A-02-02 26CDB	06-24-85	1000	530	8.50	33.5	42	14	1.6	94	7
A-02-03 28CAA	07-02-85	0945	1690	7.60	26.0	380	76	45	250	6
A-02-04 12BDD2	08-20-85	1200	655	8.40	35.0	70	10	11	110	6
A-02-04 24CAB	08-20-85	0900	1170	8.20	29.0	150	29	19	180	7
	09-05-85	1230	1140	8.20	29.0	--	--	--	--	--
A-03-01 31ABB	07-30-85	1400	610	7.60	27.0	220	41	28	45	1
A-03-04 02DAA	08-22-85	1500	585	7.70	38.0	170	31	23	51	2
A-03-04 11CCC	08-23-85	1100	470	8.00	37.5	130	17	21	45	2
A-03-04 21ADA2	08-21-85	1100	475	8.10	36.5	160	19	27	39	1
A-03-05 26CCD	08-23-85	0700	600	7.70	32.5	160	47	11	64	2
A-03-05 28ADA	08-23-85	0830	635	7.80	38.5	140	27	17	81	3
A-04-01 34ABA	06-25-85	1500	650	7.70	28.0	210	47	23	46	1
B-01-02 01CCC	06-12-85	1130	4110	7.70	42.0	440	130	28	750	16
B-01-02 17CAA	06-27-85	1330	3710	7.30	27.0	970	220	100	480	7
B-01-02 25BBC2	07-30-85	1530	2240	7.80	37.0	110	36	4.6	390	17
B-01-03 24CBB2	06-13-85	0700	6000	7.30	28.0	1400	360	130	850	10
B-01-03 27CBB	06-27-85	1100	4750	7.30	24.0	810	170	92	810	13
B-01-04 32BBB2	06-13-85	0900	540	8.90	37.0	32	8.0	2.8	99	8
B-02-02 23BBB	06-28-85	1300	475	8.80	--	70	17	6.5	72	4
B-06-03 33DCB	07-31-85	1315	660	7.60	31.0	160	39	15	87	3
C-01-04 03BDA	06-19-85	0530	6200	--	25.0	1100	370	33	1100	15
D-01-06 27CDD	07-31-85	1600	1400	7.30	28.5	450	130	30	95	2
D-01-09 07BDC2	07-30-85	0830	505	8.90	44.0	6	2.2	0.10	110	21
D-01-10 35DBC	07-29-85	1515	1270	7.40	23.0	640	190	39	46	0.8
A-02-05 06ACB	08-22-85	1230	615	8.80	31.0	20	4.7	1.9	120	12
A-02-05 08CDD2	08-22-85	0710	1320	7.90	27.0	300	57	39	120	3
A-02-05 11CAA	08-21-85	0730	1200	7.80	28.5	210	45	23	160	5
A-02-05 14AAA	08-07-85	1245	1570	7.40	25.5	300	77	27	190	5
A-02-05 14ADD	08-20-85	1430	1410	7.70	23.0	220	58	19	180	5
A-02-05 16DDA	08-22-85	0820	1980	7.40	21.0	490	120	46	210	4
A-02-05 23BDD	08-22-85	0920	1480	7.70	20.0	270	70	23	180	5
A-02-05 30DBC	08-22-85	1100	1180	7.80	25.0	250	54	27	130	4
D-02-04 25DDD	07-29-85	1145	4190	7.20	24.0	1100	330	78	460	6

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
SAFFORD BASIN										
D-04-23 19BCB2	1.2	157	69	51	1.5	29	--	370	1.20	0.030
D-04-23 22CAB	7.2	100	280	1000	2.9	42	--	2200	0.140	0.010
D-05-23 02CBB	0.60	79	44	5.5	0.60	32	--	190	0.620	0.030
D-05-24 31ACC	7.1	--	710	1500	2.3	49	--	4000	5.00	0.080
D-06-24 04ADD	3.9	--	130	210	1.4	31	--	750	1.00	0.090
D-06-24 10ACB	2.8	452	270	540	1.7	48	--	1800	9.50	0.040
D-06-24 12ADC2	8.8	--	550	1000	3.1	47	--	3000	10.0	0.040
D-06-25 05DBA	14	--	290	640	4.3	57	--	1700	1.80	<0.010
D-06-25 17AAA2	7.8	--	660	860	5.2	58	--	3000	9.10	0.030
D-06-25 23BBAA	11	152	460	1300	7.4	67	--	3100	0.500	<0.010
D-06-25 35DBD	7.6	--	400	780	1.7	47	--	2400	9.40	0.030
D-06-25 36CBB	10	--	730	3400	6.9	55	--	6900	<0.100	0.010
D-06-28 31DAB2	5.5	147	68	120	1.0	36	--	490	0.350	0.060
D-07-23 01DBD2	1.6	--	230	370	6.7	14	--	1100	<0.100	0.010
D-07-24 04CCC2	2.6	--	24	31	1.2	17	--	210	<0.100	0.020
D-07-25 03CCB1	2.5	368	240	390	2.0	56	--	1400	5.50	0.020
D-07-26 06ADD	4.2	208	88	140	2.4	42	--	620	1.60	0.060
D-07-26 15BCC	7.4	463	380	680	4.2	56	--	2300	7.40	0.030
D-07-26 18AAB	3.9	356	470	760	1.4	44	--	2400	7.80	0.040
D-07-26 21ADD	2.6	410	210	410	2.2	52	--	1500	6.40	0.080
D-07-26 24ABA	5.9	324	210	330	2.9	62	--	1300	7.50	0.050
D-07-26 28ACB3	3.6	305	1100	1600	1.6	23	--	4400	1.50	0.010
D-07-27 02AAB2	2.8	197	150	260	7.7	55	--	940	3.50	0.070
D-07-27 08DBC2	6.5	325	180	320	2.8	49	--	1100	5.00	0.040
D-07-27 16CCC	5.2	294	180	260	3.7	60	--	1100	3.40	0.020
D-08-26 06AAC1	4.8	168	440	530	2.0	31	--	1700	1.70	<0.010
D-08-26 07BAA2	5.4	38	610	1300	9.0	17	--	3000	<0.100	0.010
D-08-26 07DBD	3.4	38	390	840	7.7	21	--	2100	<0.100	0.030
D-08-26 15DCB2	2.5	238	610	440	5.1	35	--	1900	3.10	0.010
D-08-26 15DCB4	2.4	221	570	430	3.2	34	--	1800	3.60	0.010
D-08-26 17DDD	2.8	139	170	180	7.8	13	--	720	<0.100	<0.010
D-08-26 28ABC	4.6	98	340	710	7.7	35	--	1800	<0.100	<0.010
D-09-26 06BDA1	1.3	109	160	140	2.3	19	--	600	0.480	<0.010
D-09-26 18DDA	1.0	88	39	5.4	1.0	38	--	190	2.20	<0.010
SAN BERNARDINO VALLEY										
D-24-30 11CAD1	2.8	--	13	7.2	0.50	31	--	270	1.20	0.020
D-24-30 14BDB	2.6	--	13	6.5	0.40	34	--	270	1.10	0.020
D-24-30 15CDC1	4.3	--	26	15	0.40	33	--	310	4.10	0.030
D-24-30 15DAD	2.6	--	13	7.0	0.50	21	--	310	1.40	0.030
D-24-30 15DDC	4.1	--	12	6.4	0.40	20	--	260	1.70	0.030
D-24-30 23BAB1	2.5	--	14	6.4	0.40	35	--	280	1.20	0.020
SALT RIVER VALLEY										
A-01-02 01BDB	4.6	205	100	350	0.30	27	--	940	4.30	0.010
A-01-02 01CAC	7.1	313	220	440	0.40	24	--	1400	6.70	0.010
A-01-03 15ABC	5.4	353	78	210	0.40	26	--	830	5.20	0.030
A-01-03 21ACC	3.1	84	32	210	0.40	12	--	490	0.450	0.020
A-01-04 02DDB	3.7	164	76	240	0.40	28	--	660	3.50	<0.010
A-01-06 04DDC	5.7	154	85	410	1.8	25	--	960	11.0	0.020
A-02-01 04BBA2	3.9	160	97	310	<0.10	32	--	830	15.0	--
A-02-02 26CDB	2.8	100	18	78	0.60	21	--	290	2.30	<0.010
A-02-03 28CAA	4.2	245	140	300	0.60	33	--	1000	9.20	<0.010
A-02-04 12BDD2	2.1	171	20	87	0.80	23	--	370	1.50	<0.010
A-02-04 24CAB	3.6	99	57	260	0.80	18	--	630	2.90	<0.010
	--	99	--	--	--	--	--	--	--	--
A-03-01 31ABB	3.4	114	36	79	0.30	22	--	320	8.00	<0.010
A-03-04 02DAA	2.9	190	17	60	0.50	33	--	330	0.790	0.030
A-03-04 11CCC	2.7	217	9.9	28	0.50	27	--	280	0.810	<0.010
A-03-04 21ADA2	2.9	265	9.0	25	0.50	29	--	310	1.20	<0.010
A-03-05 26CCD	2.6	193	21	54	1.1	40	--	360	1.20	<0.010
A-03-05 28ADA	3.2	192	21	65	0.60	36	--	370	1.00	<0.010
A-04-01 34ABA	3.6	125	49	60	0.20	34	--	340	11.0	<0.010
B-01-02 01CCC	4.5	64	680	910	13	27	--	2600	7.80	<0.010
B-01-02 17CAA	6.9	179	600	810	0.80	25	--	2400	15.0	<0.010
B-01-02 25BBC2	4.8	90	150	550	0.10	25	--	1200	4.10	<0.010
B-01-03 24CBB2	9.1	127	1500	1300	1.5	23	--	4300	15.0	<0.010
B-01-03 27CBB	6.2	268	920	910	2.5	24	--	3100	17.0	0.010
B-01-04 32BBB2	1.5	75	60	64	5.5	22	--	320	2.70	<0.010
B-02-02 23BBB	1.9	100	35	37	2.1	21	--	260	8.10	<0.010
B-06-03 33DCB	3.0	141	87	60	1.7	32	--	410	1.10	<0.010
C-01-04 03BDA	23	115	1800	1200	1.0	19	--	4600	20.0	<0.010
D-01-06 27CDD	6.7	83	110	310	0.50	32	--	760	4.60	<0.010
D-01-09 07BDC2	0.50	162	10	43	0.60	31	--	290	5.50	0.030
D-01-10 35DBC	3.7	258	380	48	0.40	42	--	900	1.10	0.010
A-02-05 06ACB	1.4	178	20	82	1.0	18	--	360	1.30	<0.010
A-02-05 08CDD2	5.2	117	51	300	0.60	23	--	670	7.90	<0.010
A-02-05 11CAA	5.4	156	47	250	0.30	35	--	660	1.90	<0.010
A-02-05 14AAA	5.3	156	81	340	0.20	29	--	840	3.20	0.020
A-02-05 14ADD	4.6	147	69	290	0.30	26	--	740	5.00	<0.010
A-02-05 16DDA	5.1	228	160	360	0.20	28	--	1100	22.0	<0.010
A-02-05 23BDD	3.3	184	97	260	0.30	20	--	760	11.0	0.120
A-02-05 30DBC	4.4	146	41	260	0.40	29	--	630	1.40	0.020
D-02-04 25DDD	9.8	201	600	1100	0.70	35	--	2700	7.30	<0.010

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
SAFFORD BASIN										
D-04-23 19BCB2	0.09	--	--	--	--	50	--	--	--	--
D-04-23 22CAB	0.03	--	--	--	--	310	--	--	--	--
D-05-23 02CBB	0.09	--	<1	56	<0.5	20	<1	<1	<3	20
D-05-24 31ACC	0.25	--	14	56	<2	780	<3	<1	<9	<60
D-06-24 04ADD	0.28	--	4	24	<2	170	<3	<1	<9	<30
D-06-24 10ACB	0.12	--	--	--	--	420	--	--	--	--
D-06-24 12ADC2	0.12	--	--	--	--	550	--	--	--	--
D-06-25 05DBA	--	--	--	--	--	410	--	--	--	--
D-06-25 17AAA2	0.09	--	26	38	<2	780	3	<1	<9	50
D-06-25 23BBAA	--	--	44	23	2	670	<3	<1	<9	30
D-06-25 35DBD	0.09	--	5	130	<2	480	<3	<1	<9	40
D-06-25 36CBB	0.03	--	8	62	<5	890	<10	<1	<30	180
D-06-28 31DAB2	0.18	--	3	24	<0.5	50	<1	<1	<3	<10
D-07-23 01DBD2	0.03	--	--	--	--	420	--	--	--	--
D-07-24 04CCC2	0.06	--	7	28	<0.5	120	<1	3	<3	<10
D-07-25 03CCB1	0.06	--	--	--	--	250	--	--	--	--
D-07-26 06ADD	0.18	--	5	25	<0.5	100	<1	<1	<3	<10
D-07-26 15BCC	0.09	--	13	52	<2	440	<3	<1	<9	<30
D-07-26 18AAB	0.12	--	1	83	<2	260	<3	<1	<9	<30
D-07-26 21ADD	0.25	--	12	29	<2	240	<3	<1	<9	<30
D-07-26 24ABA	0.15	--	15	53	<2	190	<3	<1	10	<30
D-07-26 28ACB3	0.03	--	<1	41	<5	930	<10	<1	<30	<100
D-07-27 02AAB2	0.21	--	100	8	<0.5	210	<1	<1	<3	<10
D-07-27 08DBC2	0.12	--	5	44	<2	180	<3	<1	<9	<30
D-07-27 16CCC	0.06	--	20	32	<0.5	200	<1	<1	<3	<10
D-08-26 06AAC1	--	--	1	28	<2	360	<3	<1	<3	30
D-08-26 07BAA2	0.03	--	36	32	<2	760	<3	1	<9	30
D-08-26 07DBD	0.09	--	<1	35	<2	560	<3	<1	<9	60
D-08-26 15DCB2	0.03	--	<1	--	--	180	--	<1	--	--
D-08-26 15DCB4	0.03	--	<1	53	<2	190	<3	<1	<9	30
D-08-26 17DDD	--	--	<1	50	<0.5	320	<1	<1	<3	<10
D-08-26 28ABC	--	--	15	59	<2	800	<3	<1	<9	40
D-09-26 06BDA1	--	--	15	--	--	190	--	<1	--	--
D-09-26 18DDA	--	--	<1	--	--	10	--	<1	--	--
SAN BERNARDINO VALLEY										
D-24-30 11CAD1	0.06	20	<1	22	--	50	2	7	--	--
D-24-30 14BDB	0.06	<10	<1	32	--	40	<1	3	--	--
D-24-30 15CDC1	0.09	20	2	32	--	40	2	<1	--	--
D-24-30 15DAD	0.09	20	3	16	--	70	1	2	--	--
D-24-30 15DDC	0.09	10	3	18	--	60	<1	3	--	--
D-24-30 23BAB1	0.06	10	<1	28	--	40	2	9	--	--
SALT RIVER VALLEY										
A-01-02 01BDB	0.03	10	3	160	--	300	<1	2	--	--
A-01-02 01CAC	0.03	<10	4	<100	--	1100	<1	2	--	--
A-01-03 15ABC	0.09	<10	6	93	--	340	<1	<1	--	--
A-01-03 21ACC	0.06	10	1	11	--	130	<1	27	--	--
A-01-04 02DDB	--	--	--	--	--	200	--	--	--	--
A-01-06 04DDC	0.06	--	--	--	--	310	--	--	--	--
A-02-01 04BBA2	--	<10	2	230	--	80	<1	<1	--	--
A-02-02 26CDB	--	10	5	57	--	80	<1	31	--	--
A-02-03 28CAA	--	10	5	91	--	1600	<1	2	--	--
A-02-04 12BDD2	--	--	--	--	--	120	--	--	--	--
A-02-04 24CAB	--	--	8	33	--	190	--	18	--	--
	--	--	--	--	--	--	--	--	--	--
A-03-01 31ABB	--	--	--	--	--	30	--	9	--	--
A-03-04 02DAA	0.09	--	--	--	--	80	--	--	--	--
A-03-04 11CCC	--	--	--	--	--	70	--	--	--	--
A-03-04 21ADA2	--	--	--	--	--	60	--	--	--	--
A-03-05 26CCD	--	--	11	79	--	100	--	<1	--	--
A-03-05 28ADA	--	--	--	--	--	150	--	--	--	--
A-04-01 34ABA	--	<10	3	42	--	50	<1	6	--	--
B-01-02 01CCC	--	20	74	<100	--	2800	<1	<1	--	--
B-01-02 17CAA	--	<10	1	<100	--	2900	<1	5	--	--
B-01-02 25BBC2	--	--	--	--	--	460	--	1	--	--
B-01-03 24CBB2	--	20	5	<100	--	7400	1	3	--	--
B-01-03 27CBB	0.03	<10	4	<100	--	5100	<1	3	--	--
B-01-04 32BBB2	--	30	17	19	--	330	<1	17	--	--
B-02-02 23BBB	--	10	22	68	--	120	<1	40	--	--
B-06-03 33DCB	--	--	--	--	--	180	--	4	--	--
C-01-04 03BDA	--	<10	4	<100	--	5400	<1	4	--	--
D-01-06 27CDD	--	--	--	--	--	80	--	1	--	--
D-01-09 07BDC2	0.09	--	8	--	--	40	--	1	--	--
D-01-10 35DBC	0.03	--	--	--	--	30	--	<1	--	--
A-02-05 06ACB	--	--	--	--	--	140	--	--	--	--
A-02-05 08CDD2	--	--	--	--	--	90	--	--	--	--
A-02-05 11CAA	--	--	9	27	--	150	--	1	--	--
A-02-05 14AAA	0.06	--	--	--	--	170	--	--	--	--
A-02-05 14ADD	--	--	--	--	--	150	--	--	--	--
A-02-05 16DDA	--	--	--	--	--	540	--	--	--	--
A-02-05 23BDD	0.37	--	--	--	--	180	--	--	--	--
A-02-05 30DBC	0.06	--	--	--	--	130	--	--	--	--
D-02-04 25DDD	--	--	--	--	--	580	--	<1	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
SAFFORD BASIN									
D-04-23 19BCB2	<3	--	--	<1	--	--	--	--	--
D-04-23 22CAB	40	--	--	20	--	--	--	--	--
D-05-23 02CBB	4	<10	10	150	<10	--	160	<6	11
D-05-24 31ACC	<9	<30	560	<3	<30	--	2200	<26	14
D-06-24 04ADD	<9	<30	130	34	<30	--	300	<18	17
D-06-24 10ACB	30	--	--	<10	--	--	--	--	--
D-06-24 12ADC2	30	--	--	<10	--	--	--	--	--
D-06-25 05DBA	200	--	--	20	--	--	--	--	--
D-06-25 17AAA2	9	<30	640	5	<30	--	1700	47	11
D-06-25 23BBAA	<9	<30	1500	4	50	--	610	20	<9
D-06-25 35DBD	<9	<30	330	<3	<30	--	2100	<18	12
D-06-25 36CBB	81	<100	2200	110	<100	--	590	<60	50
D-06-28 31DAB2	8	<10	110	5	<10	--	500	9	42
D-07-23 01DBD2	30	--	--	10	--	--	--	--	--
D-07-24 04CCC2	<3	<10	130	1	<10	--	83	36	10
D-07-25 03CCB1	40	--	--	40	--	--	--	--	--
D-07-26 06ADD	<3	<10	110	1	10	--	360	13	5
D-07-26 15BCC	<9	<30	360	<3	<30	--	990	25	17
D-07-26 18AAB	<9	<30	280	<3	<30	--	2200	<18	<9
D-07-26 21ADD	<9	<30	350	<3	<30	--	500	<18	11
D-07-26 24ABA	760	<30	290	210	<30	--	770	21	15
D-07-26 28ACB3	<30	<100	64	<10	<100	--	2400	<60	63
D-07-27 02AAB2	<3	<10	300	2	<10	--	39	18	26
D-07-27 08DBC2	<9	<30	200	<3	<30	--	790	10	15
D-07-27 16CCC	4	<10	220	2	<10	--	530	24	44
D-08-26 06AAC1	<9	<30	530	120	<30	--	620	<18	12
D-08-26 07BAA2	<9	<30	2100	15	60	--	2400	<18	<9
D-08-26 07DBD	<9	<30	1700	<3	<30	--	980	<18	14
D-08-26 15DCB2	40	--	--	<10	--	--	--	--	--
D-08-26 15DCB4	39	<30	510	8	<30	--	1700	<18	31
D-08-26 17DDD	4	<10	300	3	20	--	740	<6	16
D-08-26 28ABC	39	<30	520	8	<30	--	1700	<18	37
D-09-26 06BDA1	9	--	--	1	--	--	--	--	--
D-09-26 18DDA	8	--	--	<1	--	--	--	--	--
SAN BERNARDINO VALLEY									
D-24-30 11CAD1	7	2	60	<1	--	<1	200	--	--
D-24-30 14BDB	7	<1	57	<1	--	<1	310	--	--
D-24-30 15CDC1	8	<1	18	<1	--	1	300	--	--
D-24-30 15DAD	<3	1	65	2	--	<1	110	--	--
D-24-30 15DDC	7	<1	38	<1	--	1	300	--	--
D-24-30 23BAB1	6	<1	47	<1	--	<1	330	--	--
SALT RIVER VALLEY									
A-01-02 01BDB	<3	3	100	2	--	2	1600	--	--
A-01-02 01CAC	30	4	210	<10	--	4	2200	--	--
A-01-03 15ABC	12	4	130	<1	--	<1	710	--	--
A-01-03 21ACC	7	1	59	4	--	<1	120	--	--
A-01-04 02DDB	12	--	--	2	--	--	--	--	--
A-01-06 04DDC	6	--	--	<1	--	--	--	--	--
A-02-01 04BBA2	12	<1	34	<1	--	3	1900	--	--
A-02-02 26CDB	<3	5	54	1	--	<1	520	--	--
A-02-03 28CAA	3	<1	87	<1	--	5	1500	--	--
A-02-04 12BDD2	3	--	--	1	--	--	--	--	--
A-02-04 24CAB	10	1	--	4	--	2	--	--	--
	--	--	--	--	--	--	--	--	--
A-03-01 31ABB	10	--	--	9	--	--	--	--	--
A-03-04 02DAA	<3	--	--	<1	--	--	--	--	--
A-03-04 11CCC	7	--	--	<1	--	--	--	--	--
A-03-04 21ADA2	11	--	--	<1	--	--	--	--	--
A-03-05 26CCD	14	2	--	3	--	1	--	--	--
A-03-05 28ADA	10	--	--	3	--	--	--	--	--
A-04-01 34ABA	<3	4	24	<1	--	1	720	--	--
B-01-02 01CCC	50	2	370	<10	--	3	3700	--	--
B-01-02 17CAA	50	3	130	20	--	15	4600	--	--
B-01-02 25BBC2	40	--	--	10	--	--	1200	--	--
B-01-03 24CBB2	60	12	200	100	--	33	6700	--	--
B-01-03 27CBB	30	5	110	<10	--	18	3600	--	--
B-01-04 32BBB2	4	<1	39	<1	--	3	140	--	--
B-02-02 23BBB	3	5	32	<1	--	1	600	--	--
B-06-03 33DCB	23	--	--	3	--	--	--	--	--
C-01-04 03BDA	50	5	870	<10	--	28	1900	--	--
D-01-06 27CDD	38	--	--	2	--	--	--	--	--
D-01-09 07BDC2	14	--	--	6	--	--	--	--	--
D-01-10 35DBC	16	--	--	1	--	--	--	--	--
A-02-05 06ACB	<3	--	--	<1	--	--	--	--	--
A-02-05 08CDD2	26	--	--	5	--	--	--	--	--
A-02-05 11CAA	4	1	--	2	--	<1	--	--	--
A-02-05 14AAA	6	--	--	6	--	--	--	--	--
A-02-05 14ADD	7	--	--	2	--	--	--	--	--
A-02-05 16DDA	30	--	--	3	--	--	--	--	--
A-02-05 23BDD	25	--	--	4	--	--	--	--	--
A-02-05 30DBC	39	--	--	3	--	--	--	--	--
D-02-04 25DDD	40	--	--	10	--	--	--	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
SAN SIMON BASIN										
018S21W32DDB	07-22-85	1445	1120	7.20	18.0	270	78	19	160	4
028S21W30CAC	07-24-85	1230	360	7.50	21.5	120	41	4.4	26	1
028S21W30CCA	07-24-85	1215	342	7.60	20.0	95	33	3.0	34	2
D-12-28 21DCC	07-23-85	0830	380	8.00	28.0	85	29	2.9	47	2
D-13-28 10BCC	07-23-85	1545	380	8.10	36.0	71	25	1.9	52	3
D-13-28 22DDD	07-23-85	1000	470	7.90	29.5	110	33	6.0	60	3
D-13-29 21CCC	07-23-85	1430	668	8.20	29.5	39	14	1.0	120	9
D-13-29 25CCC	07-23-85	1230	535	9.30	32.0	4	1.5	0.04	120	28
D-13-29 25CCC2	07-23-85	1300	440	7.70	24.0	130	45	4.6	44	2
D-13-30 15DAA	07-24-85	0915	1510	9.00	25.0	4	1.1	0.30	350	79
D-13-30 34DCC	07-24-85	1100	578	7.60	24.0	230	75	11	36	1
D-13-31 21CAD	07-24-85	1400	390	8.00	29.0	95	34	2.4	44	2
D-14-28 24ADB	07-24-85	1300	655	7.70	26.0	220	66	13	46	1
D-14-31 09ADD1	07-22-85	1600	4450	7.40	20.0	1100	350	44	730	10
D-14-31 09ADD3	07-22-85	1430	2370	7.50	20.0	500	160	24	370	8
D-14-31 19BAC	07-24-85	1200	510	8.40	27.0	38	13	1.1	89	7
D-14-32 19BAA	07-24-85	1000	515	>7.80	27.0	140	46	5.0	50	2
D-17-31 26DCA	07-24-85	0945	592	7.00	17.0	300	100	11	16	0.4
D-17-31 35BAA	07-24-85	1045	410	6.70	16.0	200	69	5.5	11	0.4
D-19-32 21DAC	07-24-85	1445	164	6.80	20.0	46	14	2.7	15	1
ST. JOHNS										
A-11-28 04CBD CCNN SP.	08-15-85	1145	3000	6.80	17.5	1000	310	63	320	5
A-11-28 04DBA	08-15-85	1430	720	7.80	23.0	230	56	22	76	2
A-11-28 04DBD	08-15-85	1230	610	8.00	21.0	220	59	17	41	1
A-11-28 09BDA 310CCNN C	08-15-85	1000	2050	6.70	18.5	740	210	51	200	3
A-11-28 09DAD	08-20-85	1315	2800	7.00	18.5	890	230	77	320	5
A-11-28 22BDA2	08-07-85	1500	1150	6.90	18.0	340	94	26	110	3
A-11-29 28DBC TEP P-14 3	08-20-85	1130	3200	6.70	26.5	1200	350	67	370	5
A-12-27 35CDA BIG WHITE	08-20-85	1515	880	7.30	18.0	340	86	30	53	1
A-12-28 17DCA	08-16-85	1145	3220	7.90	20.0	1000	300	65	400	6
A-13-27 13A	04-25-85	1400	1540	8.60	15.0	200	48	19	290	9
LITTLE COLORADO R. BLW.L	08-15-85	0830	515	8.10	20.5	190	50	16	42	1
UPPER SANTA CRUZ BASIN										
D-12-12 16DDD	07-10-85	1630	620	7.60	25.0	210	67	11	42	1
D-12-13 22BBB	07-10-85	1445	265	7.90	--	93	27	6.2	18	0.8
D-14-14 02BBB	07-10-85	1145	460	7.50	24.5	140	46	5.0	51	2
D-16-15 14ACB	07-11-85	0740	962	7.40	24.0	410	120	26	61	1
D-17-14 07DDD	07-11-85	0945	530	7.60	26.5	170	56	6.1	44	2
D-19-13 29CBA	07-11-85	1125	735	7.60	23.5	260	82	13	60	2
D-23-12 35BBD	07-11-85	1450	137	7.10	22.5	41	14	1.5	14	1
D-24-14 05ADB2	07-11-85	1345	580	7.50	21.5	220	70	11	44	1
UPPER SAN PEDRO BASIN										
D-24-23 13ABC1	04-17-85	1200	--	--	--	180	59	9.0	19	0.6
D-24-23 13ABD	04-16-85	0800	--	--	--	190	62	9.0	20	0.7
UPPER SALT RIVER BASIN										
A-01-15 04CBD1	11-07-84	0950	3400	6.65	18.0	2500	760	140	76	0.7
	03-20-85	0920	3720	6.44	17.0	--	--	--	--	--
A-01-15 04CBD2	03-20-85	1100	8300	3.68	17.0	2500	500	310	190	2
A-01-15 04CBD3	03-20-85	1155	3240	4.36	19.0	--	--	--	--	--
A-01-15 04DCC1	11-09-84	0820	1530	6.80	16.0	1000	310	55	56	0.8
	03-22-85	0820	705	7.05	14.5	--	--	--	--	--
A-01-15 04DCC2	03-22-85	0900	402	7.19	13.5	--	--	--	--	--
A-01-15 09DBC1	03-19-85	1615	9000	3.50	16.0	2600	500	330	230	2
A-01-15 09DBC2	11-07-84	1515	8450	3.54	19.0	2600	510	310	210	2
	03-19-85	1500	8300	3.47	16.0	--	--	--	--	--
A-01-15 09DBC3	06-25-85	0855	6000	3.77	16.0	1900	440	200	150	2
	03-19-85	1355	6800	3.49	16.0	--	--	--	--	--
A-01-15 09DBC4	03-19-85	1230	3500	3.82	16.0	--	--	--	--	--
A-01-15 09DCD1	03-21-85	1040	11000	3.58	16.5	2900	490	410	250	2
A-01-15 09DCD2	03-21-85	1150	6250	3.64	17.0	--	--	--	--	--
A-01-15 09DCD3	11-08-84	1520	9020	3.65	17.0	2700	490	370	230	2
	03-21-85	1300	9200	3.56	17.0	--	--	--	--	--
A-01-15 09DCD4	06-26-85	1115	3300	3.87	17.0	1700	490	120	100	1
	03-21-85	1350	3920	3.83	17.0	--	--	--	--	--
A-02-15 29DBD1	11-08-84	0900	3730	4.78	18.0	1900	520	150	96	1
	03-20-85	1445	4010	4.72	16.5	--	--	--	--	--
A-02-15 29DBD2	06-25-85	1350	3500	4.24	14.0	2000	550	140	90	0.9
	03-20-85	1610	1660	4.26	10.0	--	--	--	--	--
A-02-15 29DBD3	03-20-85	1700	1860	5.13	10.0	1100	330	66	56	0.8
WATERMAN WASH										
C-02-01 30AAA	07-29-85	1440	3000	8.25	33.5	140	44	7.0	570	22
C-02-02 19AAD	07-29-85	1410	1330	8.20	28.0	52	18	1.8	250	16
C-03-01 34ACC	07-29-85	1205	895	8.02	28.5	110	33	7.5	170	7
WESTERN MEXICAN DRAINAGE										
C-17-07 17CCD	01-19-85	1200	--	7.70	24.5	140	39	11	210	8
C-17-07 18D UNSURV	01-19-85	1200	--	7.70	24.5	140	38	11	200	8

> Actual value is kwown to be greater than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
SAN SIMON BASIN										
018S21W32DDB	2.3	421	91	26	1.9	57	--	690	6.60	0.030
028S21W30CAC	3.6	95	20	28	2.3	70	--	250	3.70	--
028S21W30CCA	3.5	96	16	27	4.7	73	--	250	1.60	<0.010
D-12-28 21DCC	2.1	104	44	27	0.50	30	--	250	0.920	<0.010
D-13-28 10BCC	2.8	93	41	25	0.10	30	--	230	1.20	<0.010
D-13-28 22DDD	2.4	125	50	35	0.20	27	--	290	0.300	<0.010
D-13-29 21CCC	6.1	129	110	47	5.4	22	--	400	0.620	<0.010
D-13-29 25CCC	0.60	107	100	24	2.5	22	--	340	0.280	0.010
D-13-29 25CCC2	1.5	144	44	15	1.4	30	--	270	0.630	0.020
D-13-30 15DAA	2.5	592	110	11	16	32	--	880	0.260	0.050
D-13-30 34DCC	1.8	184	100	10	0.60	37	--	380	<0.100	0.010
D-13-31 21CAD	2.1	121	46	10	1.7	37	--	250	0.420	<0.010
D-14-28 24ADB	2.8	212	48	24	2.2	33	--	360	0.490	<0.010
D-14-31 09ADD1	9.0	282	1500	450	3.4	45	--	3300	15.0	<0.010
D-14-31 09ADD3	5.1	263	670	160	4.0	45	--	1600	5.20	0.020
D-14-31 19BAC	2.3	109	83	17	6.1	68	--	350	0.150	0.010
D-14-32 19BAA	2.9	--	91	18	1.7	37	--	320	0.940	<0.010
D-17-31 26DCA	1.1	167	130	4.8	0.50	31	--	400	0.100	<0.010
D-17-31 35BAA	0.80	129	64	3.1	0.60	27	--	260	<0.100	<0.010
D-19-32 21DAC	2.1	52	6.9	9.4	0.60	57	--	140	1.40	0.030
ST. JOHNS										
A-11-28 04CBD CCNN SP.	22	550	610	390	2.3	14	--	2100	<0.100	<0.010
A-11-28 04DBA	5.0	226	140	19	2.1	21	--	480	<0.100	0.070
A-11-28 04DBD	6.8	218	69	8.9	1.6	17	--	350	<0.100	<0.010
A-11-28 09BDA 310CCNN C	15	419	390	230	2.3	13	--	1400	<0.100	<0.010
A-11-28 09DAD	20	350	690	380	0.40	12	--	1900	0.660	<0.010
A-11-28 22BDA2	19	229	120	170	2.8	5.9	--	690	<0.100	<0.010
A-11-29 28DBC TEP P-14 310C	25	560	740	460	2.8	15	--	2400	<0.100	0.020
A-12-27 35CDA BIG WHITE COR	14	271	95	71	2.8	8.5	--	530	<0.100	<0.010
A-12-28 17DCA	26	430	720	480	2.5	18	--	2300	<0.100	<0.010
A-13-27 13A	6.9	440	280	85	1.6	21	--	1000	0.980	<0.010
LITTLE COLORADO R. BLW.LYMA	3.8	169	57	31	0.60	20	--	320	<0.100	0.030
UPPER SANTA CRUZ BASIN										
D-12-12 16DDD	2.4	148	73	40	0.30	34	--	360	5.60	0.020
D-12-13 22BBB	1.5	103	9.5	6.1	1.0	33	--	160	2.80	0.020
D-14-14 02BBB	1.7	159	40	12	0.10	42	--	290	3.10	0.020
D-16-15 14ACB	2.9	192	290	22	0.20	31	--	670	1.20	<0.010
D-17-14 07DDD	2.7	130	98	14	0.50	34	--	330	3.50	<0.010
D-19-13 29CBA	2.9	183	160	15	0.90	37	--	480	2.50	<0.010
D-23-12 35BBD	2.6	60	1.7	5.6	0.20	53	--	130	0.320	0.150
D-24-14 05ADB2	2.8	200	42	27	0.60	34	--	350	6.20	0.200
UPPER SAN PEDRO BASIN										
D-24-23 13ABC1	--	<180	7.0	12	0.30	--	250	--	--	--
D-24-23 13ABD	--	168	13	12	0.30	--	260	--	--	--
UPPER SALT RIVER BASIN										
A-01-15 04CBD1	8.1	230	2000	77	0.10	38	--	3200	0.160	0.020
	--	225	--	--	--	--	3620	--	--	--
A-01-15 04CBD2	8.6	0	7000	280	0.20	110	12000	10700	<0.100	0.120
A-01-15 04CBD3	--	0	--	--	--	--	3130	--	--	--
A-01-15 04DCC1	2.8	205	760	46	0.20	26	--	1400	1.90	<0.010
	--	128	--	--	--	--	477	--	--	--
A-01-15 04DCC2	--	115	--	--	--	--	237	--	--	--
A-01-15 09DBC1	9.9	0	7800	290	0.10	110	11700	12000	<0.100	0.160
A-01-15 09DBC2	9.0	0	7800	310	0.20	110	--	11600	<0.100	0.100
	--	0	--	--	--	--	12800	--	--	--
A-01-15 09DBC3	7.0	0	5400	170	<0.10	100	--	7800	<0.100	0.060
	--	0	--	--	--	--	9420	--	--	--
A-01-15 09DBC4	--	0	--	--	--	--	3320	--	--	--
A-01-15 09DCD1	9.6	0	9800	310	0.20	110	16900	14700	<0.100	0.200
A-01-15 09DCD2	--	0	--	--	--	--	7480	--	--	--
A-01-15 09DCD3	7.3	0	8300	320	0.30	100	--	12700	<0.100	0.130
	--	0	--	--	--	--	4660	--	--	--
A-01-15 09DCD4	6.9	0	2100	92	0.20	88	--	3240	<0.100	0.020
	--	0	--	--	--	--	4300	--	--	--
A-02-15 29DBD1	8.0	13	2500	110	9.7	72	--	3900	0.140	0.020
	--	5	--	--	--	--	4490	--	--	--
A-02-15 29DBD2	6.0	0	2300	110	4.3	65	--	3570	<0.100	0.010
	--	0	--	--	--	--	1310	--	--	--
A-02-15 29DBD3	3.4	3	1100	58	0.10	18	1630	1640	0.510	<0.010
WATERMAN WASH										
C-02-01 30AAA	8.0	58	190	800	3.2	16	--	1700	10.0	<0.010
C-02-02 19AAD	5.0	66	110	260	5.1	16	--	710	6.00	<0.010
C-03-01 34ACC	4.3	118	86	160	0.90	17	--	550	8.90	<0.010
WESTERN MEXICAN DRAINAGE										
C-17-07 17CCD	4.5	--	98	170	8.7	42	--	740	2.30	--
C-17-07 18D UNSURV	4.5	--	97	160	9.0	41	--	710	2.70	--

< Actual value is known to be less then value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
SAN SIMON BASIN										
018S21W32DDB	0.09	--	9	53	<0.5	150	<1	<1	<3	<10
028S21W30CAC	--	--	3	18	<0.5	30	<1	<1	<3	<10
028S21W30CCA	--	--	4	17	0.5	50	<1	1	<3	10
D-12-28 21DCC	--	--	<1	53	<0.5	20	<1	3	<3	<10
D-13-28 10BCC	--	--	<1	38	<0.5	10	<1	<1	<3	<10
D-13-28 22DDD	--	--	<1	--	--	10	--	<1	--	--
D-13-29 21CCC	--	--	3	--	--	80	--	<1	--	--
D-13-29 25CCC	0.03	--	32	18	<0.5	50	<1	2	<3	<10
D-13-29 25CCC2	0.06	--	2	36	<0.5	30	<1	<1	<3	<10
D-13-30 15DAA	0.15	--	21	18	<0.5	2100	<1	<1	<3	<10
D-13-30 34DCC	0.03	--	1	69	<0.5	20	<1	<1	<3	<10
D-13-31 21CAD	--	--	--	37	<0.5	20	<1	<1	<3	<10
D-14-28 24ADB	--	--	<1	46	<0.5	10	<1	<1	<3	<10
D-14-31 09ADD1	--	--	4	43	<2	190	<3	<1	<9	30
D-14-31 09ADD3	0.06	--	6	45	<2	100	<3	<1	<9	<30
D-14-31 19BAC	0.03	--	20	46	<0.5	90	<1	<1	<3	<10
D-14-32 19BAA	--	--	4	54	<0.5	20	<1	<1	<3	<10
D-17-31 26DCA	--	--	<1	42	<0.5	<10	<1	<1	<3	<10
D-17-31 35BAA	--	--	<1	36	<0.5	<10	<1	<1	<3	20
D-19-32 21DAC	0.09	--	<1	13	<0.5	10	<1	<1	<3	10
ST. JOHNS										
A-11-28 04CBD CCNN SP.	--	--	--	--	--	610	--	--	--	--
A-11-28 04DBA	0.21	--	--	--	--	200	--	--	--	--
A-11-28 04DBD	--	--	--	--	--	130	--	--	--	--
A-11-28 09BDA 310CCNN C	--	20	16	200	<10	360	<1	--	<1	3
A-11-28 09DAD	--	<10	<1	<100	<10	410	<1	--	<1	3
A-11-28 22BDA2	--	--	--	--	--	210	--	--	--	--
A-11-29 28DBC TEP P-14 310C	0.06	10	35	300	<10	710	<1	--	<1	<1
A-12-27 35CDA BIG WHITE COR	--	<10	2	42	0.9	480	<1	--	<1	3
A-12-28 17DCA	--	20	19	200	<10	750	<1	--	<1	<1
A-13-27 13A	--	--	--	--	--	1000	--	--	--	--
LITTLE COLORADO R. BLW.LYMA	0.09	20	3	91	<0.5	70	<1	--	<1	2
UPPER SANTA CRUZ BASIN										
D-12-12 16DDD	0.06	--	2	97	<0.5	60	<1	<1	<3	<10
D-12-13 22BBB	0.06	--	--	--	--	10	--	--	--	--
D-14-14 02BBB	0.06	--	2	140	<0.5	20	<1	<1	<3	<10
D-16-15 14ACB	--	--	2	30	<0.5	90	<1	<1	<3	<10
D-17-14 07DDD	--	--	5	81	<0.5	60	<1	<1	<3	<10
D-19-13 29CBA	--	--	6	56	<0.5	90	<1	<1	<3	<10
D-23-12 35BBD	0.46	--	--	--	--	10	--	--	--	--
D-24-14 05ADB2	0.61	--	8	31	<0.5	90	<1	<1	<3	<10
UPPER SAN PEDRO BASIN										
D-24-23 13ABC1	--	--	<0	<1	--	--	<0	--	--	<0
D-24-23 13ABD	--	--	<0	<1	--	--	<0	--	--	<0
UPPER SALT RIVER BASIN										
A-01-15 04CBD1	0.06	<100	<1	47	<2	50	4	--	<9	30
	--	--	--	--	--	--	--	--	--	--
A-01-15 04CBD2	0.37	180000	<1	20	190	520	250	--	--	100000
A-01-15 04CBD3	--	--	--	--	--	--	--	--	--	--
A-01-15 04DCC1	--	<100	<1	100	<0.5	60	2	--	<3	20
	--	--	--	--	--	--	--	--	--	--
A-01-15 04DCC2	--	--	--	--	--	--	--	--	--	--
A-01-15 09DBC1	0.49	220000	<1	13	210	520	400	--	--	120000
A-01-15 09DBC2	0.31	230000	<1	9	190	440	260	--	1400	110000
	--	--	--	--	--	--	--	--	--	--
A-01-15 09DBC3	0.18	130000	<5	13	47	260	170	--	8800	60000
	--	--	--	--	--	--	--	--	--	--
A-01-15 09DBC4	--	--	--	--	--	--	--	--	--	--
A-01-15 09DCD1	0.61	200000	<1	<10	260	670	580	--	--	160000
A-01-15 09DCD2	--	--	--	--	--	--	--	--	--	--
A-01-15 09DCD3	0.40	230000	<1	16	190	550	400	--	--	130000
	--	--	--	--	--	--	--	--	--	--
A-01-15 09DCD4	0.06	18000	<1	16	19	60	25	--	1800	15000
	--	--	--	--	--	--	--	--	--	--
A-02-15 29DBD1	0.06	12000	<1	43	43	130	45	--	1300	24000
	--	--	--	--	--	--	--	--	--	--
A-02-15 29DBD2	0.03	10000	<5	19	16	90	30	--	2100	15000
	--	--	--	--	--	--	--	--	--	--
A-02-15 29DBD3	--	200	<1	20	<0.5	50	2	--	6	70
WATERMAN WASH										
C-02-01 30AAA	--	--	--	--	--	310	--	10	--	--
C-02-02 19AAD	--	--	--	--	--	270	--	4	--	--
C-03-01 34ACC	--	--	--	--	--	210	--	16	--	--
WESTERN MEXICAN DRAINAGE										
C-17-07 17CCD	--	230	10	35	--	750	<1	<2	--	--
C-17-07 18D UNSURV	--	20	12	30	--	720	<1	<5	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985--Continued

LOCAL WELL NUMBER	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
SAN SIMON BASIN									
018S21W32DDB	<3	<10	40	1	<10	--	490	<6	8
028S21W30CAC	79	<10	27	19	<10	--	230	8	110
028S21W30CCA	3	<10	38	2	<10	--	220	7	17
D-12-28 21DCC	6	<10	32	2	<10	--	290	7	<3
D-13-28 10BCC	<3	<10	49	1	<10	--	230	6	3
D-13-28 22DDD	32	--	--	2	--	--	--	--	--
D-13-29 21CCC	5	--	--	1	--	--	--	--	--
D-13-29 25CCC	3	<10	80	1	<10	--	22	49	<3
D-13-29 25CCC2	14	<10	29	2	<10	--	230	<6	<3
D-13-30 15DAA	46	<10	140	2	40	--	250	<6	25
D-13-30 34DCC	9	<10	23	2	<10	--	630	<6	98
D-13-31 21CAD	<3	<10	54	1	<10	--	560	7	4
D-14-28 24ADB	4	<10	17	7	<10	--	300	7	430
D-14-31 09ADD1	<9	<30	300	<3	<30	--	3700	<18	20
D-14-31 09ADD3	<9	<30	160	<3	<30	--	1800	<18	24
D-14-31 19BAC	11	<10	54	2	<10	--	490	7	42
D-14-32 19BAA	<3	<10	68	1	<10	--	800	7	<3
D-17-31 26DCA	35	<10	21	7	<10	--	1600	<6	450
D-17-31 35BAA	75	<10	16	7	<10	--	600	<6	320
D-19-32 21DAC	3	10	8	4	<10	--	86	<6	180
ST. JOHNS									
A-11-28 04CBD CCNN SP.	180	--	--	30	--	--	--	--	--
A-11-28 04DBA	13	--	--	20	--	--	--	--	--
A-11-28 04DBD	11	--	--	34	--	--	--	--	--
A-11-28 09BDA 310CCNN C	480	2	--	30	2	<1	1700	--	30
A-11-28 09DAD	110	3	--	70	4	12	2700	--	50
A-11-28 22BDA2	3000	--	--	230	--	--	--	--	--
A-11-29 28DBC TEP P-14 310C	2600	3	--	50	3	<1	2800	--	30
A-12-27 35CDA BIG WHITE COR	1500	6	--	36	3	<1	1600	--	520
A-12-28 17DCA	30	4	--	<10	1	<1	2800	--	20
A-13-27 13A	29	--	--	3	--	--	--	--	--
LITTLE COLORADO R. BLW.LYMA	11	3	--	11	1	<1	480	--	31
UPPER SANTA CRUZ BASIN									
D-12-12 16DDD	8	<10	17	1	<10	--	590	<6	18
D-12-13 22BBB	11	--	--	3	--	--	--	--	--
D-14-14 02BBB	8	<10	11	1	<10	--	250	<6	100
D-16-15 14ACB	21	10	39	3	<10	--	1300	<6	8
D-17-14 07DDD	<3	<10	61	1	<10	--	480	<6	8
D-19-13 29CBA	6	<10	110	6	<10	--	620	<6	47
D-23-12 35BBD	3	--	--	2	--	--	--	--	--
D-24-14 05ADB2	14	<10	18	16	<10	--	270	<6	290
UPPER SAN PEDRO BASIN									
D-24-23 13ABC1	<0	<0	--	<0	--	<0	--	--	<0
D-24-23 13ABD	<0	<0	--	<0	--	<0	--	--	<0
UPPER SALT RIVER BASIN									
A-01-15 04CBD1	58	40	180	8000	<30	--	1400	<18	71
	--	--	--	--	--	--	--	--	--
A-01-15 04CBD2	1900000	<100	910	63000	<100	--	1900	470	9500
A-01-15 04CBD3	--	--	--	--	--	--	--	--	--
A-01-15 04DCC1	230	20	31	85	<10	--	970	<6	23
	--	--	--	--	--	--	--	--	--
A-01-15 04DCC2	--	--	--	--	--	--	--	--	--
A-01-15 09DBC1	2300000	<100	590	63000	<100	--	1500	600	15000
A-01-15 09DBC2	1900000	220	540	57000	<10	--	1600	560	11000
	--	--	--	--	--	--	--	--	--
A-01-15 09DBC3	1100000	110	360	44000	<100	--	1300	200	7400
	--	--	--	--	--	--	--	--	--
A-01-15 09DBC4	--	--	--	--	--	--	--	--	--
A-01-15 09DCD1	2900000	<100	2100	77000	<100	--	1300	750	20000
A-01-15 09DCD2	--	--	--	--	--	--	--	--	--
A-01-15 09DCD3	2400000	320	600	67000	<10	--	1400	690	15000
	--	--	--	--	--	--	--	--	--
A-01-15 09DCD4	160000	40	220	42000	<30	--	2000	<18	1800
	--	--	--	--	--	--	--	--	--
A-02-15 29DBD1	300000	70	310	82000	<30	--	2100	53	3000
	--	--	--	--	--	--	--	--	--
A-02-15 29DBD2	220000	40	160	50000	<30	--	1900	22	2200
	--	--	--	--	--	--	--	--	--
A-02-15 29DBD3	64	<10	31	2000	<10	--	1100	<6	42
WATERMAN WASH									
C-02-01 30AAA	30	--	--	<10	--	--	--	--	--
C-02-02 19AAD	4	--	--	<1	--	--	--	--	--
C-03-01 34ACC	5	--	--	3	--	--	--	--	--
WESTERN MEXICAN DRAINAGE									
C-17-07 17CCD	18	<1	110	<1	--	3	490	--	--
C-17-07 18D UNSURV	7	<1	100	1	--	3	470	--	--

< Actual value is known to be less than value shown.

BLANK PAGE

INDEX

Page
Accuracy of field data and computed results.... 25
Acre-foot, definition of.... 5
Agua Fria basin, ground-water levels in.... 310
Agua Fria River, at El Mirage.... 300
  at Waddell Dam.... 244
  below Waddell Dam.... 246-247
  near Mayer.... 235
  near Rock Springs.... 237-240
Alamo Dam, Bill Williams River below.... 111
Alamo Lake, contents of.... 111
Alamo Wash (tributary to Rillito Creek) at Tucson.... 300
Alamo Wash (tributary to Cherioni Wash) near Ajo.... 301
Algae, definition of.... 5
All-American Canal, below Pilot Knob wasteway, CA.... 281
  near Imperial Dam, AZ-CA.... 276
Alma, NM, San Francisco River near.... 145
Analyses, water-quality miscellaneous sites.... 303-307
  water quality of ground water.... 318-337
Andrade, CA, Colorado River near.... 265-269
Apache Lake, capacity of.... 196
Aquifer, definition of.... 5
Aravaipa Creek near Mammoth.... 164
Aravaipa Valley, ground-water levels in.... 310
Arizona Canal, diversion from, at Phoenix.... 231
Arizona fixed station network, definition of.... 19
Arlington, Centennial Wash at Southern Pacific Railroad bridge near.... 250
  Hassayampa River near.... 250
Ash mass, definition of.... 7
Avra Valley, ground-water levels in.... 310

Bacteria, definition of.... 5
  fecal coliform, definition of.... 5
  fecal streptococcal, definition of.... 7
  total coliform, definition of.... 5
Bagdad, Burro Creek at Old U.S. 93 bridge near.... 108
  Francis Creek near.... 107
  Santa Maria River near.... 110
Bartlett Dam, Verde River below.... 221-224
Bartlett Reservoir, capacity of.... 220
Bed material, definition of.... 7
Big Chino Valley, ground-water levels in.... 310
Big Sandy River near Wikieup.... 109
Big Sandy Valley, ground-water levels in.... 310
Bill Williams, ground-water levels in.... 310
Bill Williams River, below Alamo Dam.... 111
  at Mineral Wash near Planet.... 112-113
Bill Williams River basin, surface-water and water-quality records in.... 107-113
Biomass, definition of.... 7
Black Mesa, ground-water levels in.... 310
Black River, below pumping plant, near Point of Pines.... 176
  near Fort Apache.... 177
  Willow Creek diversion from, near Morenci.... 149
Black Rock Reservoir, Zuni River above.... 47
Blue-green algae, definition of.... 11
Blue Ridge Reservoir near Pine.... 57
Blue River near Clifton.... 147
Blythe, Palo Verde Canal near.... 127-128
Bonita Creek near Morenci.... 151
Bottom material, definition of.... 7
Boulder City, NV, Las Vegas Wash near.... 78-82
Boulder Creek near Rock Springs.... 241
Bruce Church drain, return surface flows by.... 283,287
Bruce Church wasteway, return surface flows by.... 283,287
Burro Creek at Old U.S. 93 bridge near Bagdad.... 108
Butler Valley, ground-water levels in.... 310

Calva, Gila River at.... 153-156
Cameron, Little Colorado River at.... 59-60
  Little Colorado River near.... 62
Camp Verde, Fossil Creek diversions near.... 210
  West Clear Creek near.... 209
Canada del Oro near Oracle Junction.... 174

Page
Canyon Diablo, ground-water levels in.... 310
Canyon Lake, capacity of.... 196
CAP Canal Havasu Pumping plant near Parker.... 114
CAP Canal at MP 7.9 near Parker Dam.... 115
CAP Canal at MP 162.3 at 7th Street at Phoenix.... 116-117
Carrizo Creek near Show Low.... 182
Castle Hot Springs, Humbug Creek near.... 242
Cave Creek, at Phoenix.... 234
  below Cottonwood Wash near Cave Creek.... 233
  near Cave Creek.... 300
Cells/volume, definition of.... 7
Cemetery Wash, at Tucson.... 299
Centennial Wash at Southern Pacific Railroad
  at Narrows Dam near Salome.... 301
  bridge near Arlington.... 250
Cfs-day, definition of.... 7
Chambers, Puerco River near.... 54
Charleston, San Pedro River at.... 161
Chemical oxygen demand, definition of.... 8
Cherry Creek near Globe.... 185
Chevelon Creek below Wildcat Canyon near Winslow.... 299
Chevelon, ground-water levels in.... 311
Childs, East Verde River near.... 212
  Wet Bottom Creek near.... 213-215
Chinle Creek near Mexican Water.... 33
Chinle, ground-water levels in.... 311
Chlorophyll, definition of.... 8
Cholla Wash at Tucson.... 299
Chrysotile, Cibecue Creek near.... 184
  Salt River near.... 183
Cibecue Creek near Chysotile.... 184
Cibola Lake Inlet near Cibola.... 130
Cibola Lake Outlet near Cibola.... 130
Cibola Valley, Colorado River below.... 131
Clarkdale, Verde River near.... 204
Claypool, Miami Wash Tributary at Highway 88, near.... 305
  Miami Wash at State Highway 88, near.... 306
Clear Creek, below Willow Creek, near Winslow.... 58
Cleator, Turkey Creek near.... 236
Clifton, Blue River near.... 147
  Gila River near.... 143
  San Francisco River at.... 148
Colorado River, above Imperial Dam, AZ-CA.... 132-137
  at Compact point, near Lees Ferry.... 43
  at Lees Ferry.... 35-41
  at Needles, CA.... 104
  at northerly international boundary above Morelos Dam, near Andrade, CA.... 265-269
  at Palo Verde Dam, AZ-CA.... 129
  at southerly international boundary, near San Luis.... 270
  below Cibola Valley.... 131
  below Davis Dam, AZ-NV.... 98-103
  below Hoover Dam, AZ-NV.... 91-96
  below Imperial Dam, AZ-CA.... 138
  below Laguna Dam, AZ-CA.... 139
  below Parker Dam, AZ-CA.... 120-125
  below Yuma Main Canal wasteway, at Yuma.... 263
  diversions to Mittry Lake.... 132
  near Grand Canyon.... 63-67
  Hoover Dam to Imperial Dam, ground-water levels in.... 311
Colorado River aqueduct near Parker Dam, AZ-Ca.... 106
  Main Canal near Parker.... 126
Concho, ground-water levels in.... 311
Contents, definition of.... 8
Continental, Santa Cruz River at.... 173
Control, definition of.... 8
Coolidge Dam, Gila River below.... 159
  San Carlos Reservoir at.... 158
Cooper wasteway, return surface flows by.... 285,288
Cooperation.... 2-3
Cornville, Oak Creek near.... 206
Cottonwood Creek near Waddell Dam.... 243
Craycroft Wash, tributary near Tucson.... 300
Crest-stage partial-record stations.... 299-301

Page
Cubic feet per second per square mile, definition of........ 8
Cubic foot per second, definition of........ 8

Data, ground-water level records, collection and publication of........ 28
  stage and water-discharge records, accuracy of field data and computed results........ 25
    collection and computation of........ 20-22
    other data available........ 25
    publication of........ 22-24
  water-quality records, collection and examination of data........ 26
    sediment........ 27-28
    water analysis........ 26-27
    water temperature........ 27
Davis Dam, AZ-NV, Colorado River below........ 98-103
  diversions and return flows between, and Parker Dam........ 105
  Lake Mohave at........ 97
Definition of terms........ 5-16
Diagram, schematic, showing gaging stations and water-quality stations between Imperial Dam and southerly international boundary........ 264
  well-numbering system........ 18
Diatoms, definition of........ 11
Discharge, definition of........ 8
  instantaneous, definition of........ 8
  mean, definition of........ 8
Dissolved, definition of........ 8
Diversity index, definition of........ 8-9
Dome, Gila River near........ 259-262
Douglas, Whitewater Draw near........ 301
Douglas basin, ground-water levels in........ 311
Downstream order and station numbers........ 16
Drain 8-B, return surface flows by........ 284,288
Drainage area, definition of........ 9
Dry Beaver Creek near Rimrock........ 208
Dry mass, definition of........ 7
Duncan basin, ground-water levels in........ 311

Eagle Creek, above pumping plant, near Morenci........ 150
  pumpage from........ 150
East Main Canal wasteway, return surface flows by........ 286,288
East Verde River, diversion from East Clear Creek, near Pine........ 211
  near Childs........ 212
Eleven Mile wasteway, return surface flows by........ 285,288
Enterprise Canal, diversions to........ 251

Florence-Casa Grande Canal, diversions from........ 169
Flowing Wells Wash at Tucson........ 299
Forestdale Creek diversion from Show Low Creek, near Show Low........ 181
Fort Apache, Black River near........ 177
  East Fork White River near........ 179
  White River near........ 180
Fort McDowell, diversions from Salt and Verde Rivers near........ 228
  Sycamore Creek near........ 227
Fortuna wasteway, return surface flows by........ 282,287
Fossil Creek diversions to Childs powerplant, near Camp Verde........ 210
Francis Creek near Bagdad........ 107

Gage height, definition of........ 9
Gaging station, definition of........ 9
  map showing location of........ 31
Gila, NM, Gila River near........ 140
Gila Bend basin, ground-water levels in........ 312
Gila Bend Canal, diversions to........ 251
Gila Gravity Main Canal, at Imperial Dam, AZ-CA........ 275
  at pumping plant, diversion by........ 271,274
Gila River, above diversions at Gillespie Dam........ 251-255
  at Calva........ 153-156
  at head of Safford Valley near Solomon........ 152
  at Kelvin........ 167-168
  at Winkelman........ 160
  below Blue Creek, near Virden, NM........ 142
  below Coolidge Dam........ 159
  below Gillespie Dam........ 256
  below Painted Rock Dam........ 257
  diversions from, Florence-Casa Grande Canal........ 169

Page
Gila River, near Clifton........ 143
  near Dome........ 259-262
  near Gila, NM........ 140
  near Laveen........ 170
  near Mohawk........ 258
  near Redrock, NM........ 141
  Painted Rock Dam to Texas Hill, ground-water levels in........ 312
  San Carlos Reservoir to Kelvin, ground-water levels in........ 312
  Texas Hill to Dome, ground-water levels in........ 312
Gila River basin, crest-stage partial-record stations in........ 299-301
  discharge measurements at miscellaneous sites in........ 302
  surface-water and water-quality records in........ 140-262
Gillespie Dam, Gila River above diversions, at........ 251-255
  Gila River below........ 256
Gisela, Rye Creek near........ 194
Glen Canyon dam, Lake Powell at........ 34
Glenwood, NM, San Francisco River near........ 146
Globe, Cherry Creek near........ 185
  Pinal Creek at Inspiration Dam near........ 186-189
Grand Canyon, Colorado River near........ 63-67
Granite Reef Dam, diversions from Salt River at........ 230
Green algae, definition of........ 11
Ground water, areas, index map of........ 308-309
  level records, explanation of........ 28
  water levels........ 310-317
  water quality........ 318-337

Hardness, definition of........ 9
Harquahala Plains ground-water levels in........ 312
Hassayampa basin, ground-water levels in........ 312
Hassayampa River, near Arlington........ 250
  near Morristown........ 250
Henderson, NV, Las Vegas Wash near........ 75-77
Holbrook, ground-water levels in........ 312
Hoover Dam, AZ-NV, Colorado River below........ 91-96
  Lake Mead at........ 83-90
Hopi, ground-water levels in........ 312
Horseshoe Dam, reservoir system on Verde River at and below........ 220
  Verde River above........ 216-219
Horseshoe Reservoir, capacity of........ 220
House Rock, ground-water levels in........ 312
Hualapai Valley, ground-water levels in........ 313
Humbug Creek near Castle Hot Springs........ 242
Hydrologic bench-mark station, definition of........ 19
  Wet Bottom Creek near Childs........ 213-215
Hydrologic conditions........ 3-5
  graph of........ 6
Hydrologic unit, definition of........ 9

Imperial Dam, AZ-CA, All-American Canal near........ 276
  Colorado River above........ 132-137
  Colorado River below........ 138
  diversions and return flows at and below........ 271-292
  diversions and return flows between, and Palo Verde Dam........ 130
  diversions at and below........ 271-274
  Gila Gravity Main Canal at........ 275
  return surface flows below........ 282-288
  schematic diagram of gaging stations and water-quality stations between, and southerly international boundary........ 264
Indian Bend Wash, at Shea Boulevard at Phoenix........ 300
Introduction........ 1-2

Joseph City, Little Colorado River near........ 55-56

Kanab, ground-water levels in........ 313
Kanab Creek basin, surface-water records in........ 68
Kanab Creek near Kanab, UT........ 68
Kelvin, Gila River at........ 167-168
Kom Vo, Vamori Wash at........ 294-295

Laguna Canal wasteway, return surface flows by........ 282,287
Laguna Dam, AZ-CA, Colorado River below........ 139
Lake Havasu, diversions from........ 106
Lake Havasu near Parker Dam, AZ-CA........ 118-119
Lake Mead at Hoover Dam, AZ-NV........ 83-90

Page
Lake Mohave at Davis Dam, AZ-NV 97
Lake Pleasant, at Waddell Dam 245
Lake Powell at Glen Canyon Dam 34
Lakes and reservoirs:
  Alamo Lake, contents of 111
  Blue Ridge Reservoir near Pine 57
  Havasu, Lake, near Parker Dam, AZ-CA 118-119
  Mead, Lake, at Hoover Dam, AZ-NV 83-90
  Mohave, Lake, at Davis Dam, AZ-NV 97
  Painted Rock Reservoir, contents of 257
  Pleasant, Lake, at Waddell Dam 245
  Powell, Lake, at Glen Canyon Dam 34
  Reservoir system on Salt River 196
  Reservoir system on Verde River 220
  San Carlos Reservoir at Coolidge Dam 158
  Senator Wash Reservoir, contents of 132
  Show Low Lake, contents of 50
Lakeside, Show Low Creek near 48
Las Vegas Valley, surface-water and water-quality records in 75-82
Las Vegas Wash, near Boulder City, NV 78-82
  near Henderson, NV 75-77
Laveen, Gila River near 170
  Santa Cruz River near 175
Lees Ferry, Colorado River at 35-41
  Colorado River at Compact point, near 43
  Paria River at 42
Leroux Wash near Holbrook 299,307
Leslie Creek near McNeal 297
Levee Canal wasteway, return surface flows by 282,287
Little Chino Valley, ground-water levels in 313
Little Colorado River, above Lyman Lake, near St. Johns 44
  above Salado Springs near St. Johns 303
  above Zion Reservoir near St. Johns 45-46
  at Cameron 59-60
  at Woodruff 53
  below Salado Springs near St. Johns 304
  near Cameron 62
  near Joseph City 55-56
Little Colorado River basin,
  crest-stage partial-record stations in 299
  discharge measurements at miscellaneous sites in 302
  surface-water and water-quality records in 44-62
Littlefield, Virgin River at 69-72
Lochiel, Santa Cruz River near 171
Lower Hassayampa, ground-water levels in 313
Lower San Pedro basin, ground-water levels in 313
Lower Santa Cruz basin, ground-water levels in 313
Lower Verde River, ground-water levels in 313
Lukeville, Quitobaquito Spring near 296

McMullen Valley, ground-water levels in 314
McNary, North Fork White River near 178
McNeal, Leslie Creek near 297
Main Drain, return surface flows by 285,288
Main Outlet Drain Extension above Morelos Dam, return surface flows by 285,288
  below Morelos Dam, return surface flows by 285,288
Mammoth, Aravaipa Creek near 164
  San Pedro River near 165-166
Mayer, Agua Fria River near 235
Mexican Water, Chinle Creek near 33
Miami Wash, at State Highway 88, near Claypool 305
  Tributary, at Highway 88, near Claypool 306
Micrograms per gram, definition of 9
Micrograms per liter, definition of 9
Milligrams per liter, definition of 9
Miscellaneous sites, analyses of samples at 303-307
  definition of 9
  discharge measurements at 302
  diagram showing numbering system for wells and 17
Mittry Lake, diversions to 132
Mittry Lake Outlet Channel, return surface flows by 282,287
Moenkopi Wash at Moenkopi 61
Mohawk, Gila River near 258
Montezuma Well Outlet near Rimrock 207
Morenci, Bonita Creek near 151
  Eagle Creek near 150
  Willow Creek diversion from Black River near 149
Morristown, Hassayampa River near 250

National Geodetic Vertical Datum of 1929, definition of 10
National stream-quality accounting network, definition of 19
National Water Information System 2

Page
Needles, CA, Colorado River at 104
  Topock Marsh Inlet near 105
Networks and programs, special 19-20
New River, near Rock Springs 248
New River-Cave Creek, ground-water levels in 314
Nogales, Santa Cruz River near 172
North Gila Drain No.1, return surface flows by 282,287
North Gila Drain No. 3, return surface flows by 282,287
North Gila Main Canal, diversion by 271,274
North Gila Main Canal No. 2, diversion by 271,274
North Gila Main Canal wasteway, return surface flows by 282,287
Numbering system for wells and miscellaneous sites 16-18

Oak Creek, at Sedona 205
  near Cornville 206
Oracle Junction, Canada del Oro near 174
Order, downstream, and station numbers 16
Organic mass, definition of 7
Organism, definition of 10
  organism count/volume 10
  total organism count 10

Painted Rock Dam, Gila River below 257
Painted Rock Reservoir, contents of 257
Palo Verde Canal near Blythe, CA 127-128
Palo Verde Dam, AZ-CA, Colorado River at 129
  diversions and return flows between, and Imperial Dam 130
  diversions and return flows between, and Parker Dam 126-128
Pantano Wash near Vail 300
Paria River at Lees Ferry 42
Paria River basin, surface-water records in 42
Parker, CAP Canal Havasu Pumping Plant near 114
  CAP Canal at MP 7.9 near 115
  Colorado River Indian Reservation, Main Canal near 126
Parker Dam, AZ-CA, Colorado River aqueduct near 106
  Colorado River below 120-125
  diversions and return flows between, and Davis Dam 105
  diversions and return flows between, and Palo Verde Dam 126-128
  Lake Havasu near 118-119
Partial-record stations, crest-stage, discharge at 299-301
  map showing location of 298
  definition of 10
Particle size, definition of 10
Particle-size classification, definition of 10
Paulden, Verde River near 203
  Williamson Valley Wash near 202
Percent composition, definition of 11
Peridot, San Carlos River near 157
Periphyton, definition of 11
Pesticide program, definition of 20
Pesticides, definition of 11
Phoenix, CAP Canal at MP 162.3 at 7th Street at 116-117
  Cave Creek at 234
  diversions from Arizona Canal at 231
  Salt River tributary at 232
  Skunk Creek near 249
Phytoplankton, definition of 11
Picocurie, definition of 11
Pilot Knob powerplant and wasteway near Pilot Knob, CA 280
Pilot Knob wasteway, CA, All-American Canal below 281
Pinal Creek at Inspiration Dam near Globe 186-189
Pine, Blue Ridge Reservoir near 57
Pine, East Verde River diversion from East Clear Creek near 211
Pisinimo, San Simon Wash near 293
Planet, Bill Williams River near 112-113
Plankton, definition of 11
Point of Pines, Black River near 176
Polychlorinated biphenyls, definition of 12
Pontiac Canal, diversion by 272,274
Programs, special networks and 19-20

Page

- Puerco River near Chambers 54
- Puerco-Zuni, ground-water levels in 314

- Quality of ground water 318-337
- Quitobaquito Spring near Lukeville 296

- Radiochemical program, definition of 20
- Ranegras Plain, ground-water levels in 314
- Records, explanation of, ground-water level 28
  - of discharge collected by agencies other than the Geological Survey 26
  - stage and water-discharge 20-26
  - water-quality 26-28
- Recoverable from bottom material, definition of 12
- Redington, San Pedro River near 163
- Redrock, NM, Gila River near 141
- Reservation Drain No. 2, return surface flows by 284,288
- Reservation Drain No. 3, return surface flows by 284,288
- Reservation Drain No. 7, return surface flows by 284,288
- Reservation Drain No. 11, return surface flows by 284,288
- Reservation Main Canal, diversion by 272,274
- Reservation Main Drain No. 4, return surface flows by 284,288
- Reservation Main Drain No. 6, return surface flows by 284,288
- Reserve, NM, San Francisco River near 144
- Reservoirs. See Lakes and reservoirs
- Rimrock, Dry Beaver Creek near 208
  - Montezuma Well Outlet near 207
  - Wet Beaver Creek near 300
- Rincon Creek near Tucson 300
- Rio Sonoyta basin, surface-water and water-quality records in 293-296
- Riverside, NV, Virgin River above Halfway Wash near 73-74
- Rob Wash at Tucson 300
- Rock Springs, Agua Fria River near 237-240
  - Boulder Creek near 241
  - New River near 248
- Roller Coaster Wash near Tucson 300
- Roosevelt, Salt River near 190-193
  - Tonto Creek near 195
- Roosevelt Dam, reservoir system on Salt River at and below 196
- Roosevelt Lake, capacity of 196
- Runoff in inches, definition of 12
- Rye Creek near Gisela 194

- Sabino Creek near Tucson 300
- Sacramento Valley, ground-water levels in 314
- Safford basin, ground-water levels in 314
- Saguaro Lake, capacity of 196
- St. Johns, Little Colorado River near 44-46
- St. Johns, ground-water levels in 315
- Salt River basin, Upper, ground-water levels in 315
- Salt River, below Stewart Mountain Dam 197-201
  - diversion for city of Phoenix from, near Fort McDowell 228
  - diversion from, at Granite Reef Dam 230
  - near Chrysotile 183
  - near Roosevelt 190-193
  - reservoir system on, at and below Roosevelt Dam 196
  - tributary in South Mountain Park, at Phoenix 232
- Salt River Valley, ground-water levels in 314-315
- San Bernardino Valley, ground-water levels in 315
- San Carlos Reservoir at Coolidge Dam 158
- San Carlos River near Peridot 157
- San Francisco Peaks, ground-water levels in 315
- San Francisco River, at Clifton 148
  - near Alma, NM 145
  - near Glenwood, NM 146
  - near Reserve, NM 144
  - pumpage from 150
- San Juan River basin, discharge measurements at miscellaneous sites in 302
  - surface-water records in 33
- San Luis, Colorado River near 270
- San Pedro basin, Lower, ground-water levels in 313
- San Pedro basin, Upper, ground-water levels in 316
- San Pedro River, at Charleston 161
  - at Palominas 299
  - below Aravaipa Creek near Mammoth 165-166
  - near Redington 163
  - near Tombstone 162
- San Simon basin, ground-water levels in 315
- San Simon River, at Tanque 299
- San Simon Wash near Pisinimo 293
- San Simon Wash, ground-water levels in 315
- San Simon Wash basin, surface-water and water-quality records in 293-295
- Santa Cruz basin, Lower, ground-water levels in 313
  - Upper, ground-water levels in 316
- Santa Cruz River, at Continental 173
  - at Cortaro 300
  - near Laveen 175
  - near Lochiel 171
  - near Nogales 172
- Santa Maria River near Bagdad 110
- Scottsdale, Verde River near 229
- Sediment, definition of 12
  - explanation of 27-28
  - mean concentration, definition of 13
  - suspended, definition of 12
    - concentration, definition of 12
    - discharge, definition of 12-13
    - load, definition of 13
  - total discharge, definition of 13
- Sedona, Oak Creek at 205
- Senator Wash Reservoir, contents of 132
- Seston, definition of 13
- Show Low, Carrizo Creek near 182
  - Forestdale Creek diversion from Show Low Creek near 181
- Show Low Creek, below Jaques Dam, near Show Low 50-51
  - near Lakeside 48
- Show Low Lake, contents of 50
- Silver Creek near Snowflake 52
- Skunk Creek near Phoenix 249
- Snowflake, Silver Creek near 52
  - ground-water levels in 315
- Sodium-adsorption ratio, definition of 13
- Solomon, Gila River near 152
- Solute, definition of 13
- South Gila Drain No. 2, return surface flows by 283,287
- South Gila Main Canal, diversion by 271,274
- South Gila Pump Outlet Channel No. 1, return surface flows by 283,287
- South Gila Pump Outlet Channel No. 2, return surface flows by 283,287
- South Gila Pump Outlet Channel No. 3, return surface flows by 282,287
- South Gila Pump Outlet Channel No. 4, return surface flows by 283,287
- South Gila Terminal wasteway, return surface flows by 283,287
- Specific conductance, definition of 13
- Stage and water-discharge records, explanantion of 20-26
- Stage-discharge relation, definition of 13
- Stewart Mountain Dam, Salt River below 197-201
- Streamflow, definition of 13
- Substrate, definition of 14
  - artificial, definition of 14
  - natural, definition of 14
- Sulphur Spring Valley, surface-water records 297
- Sunflower, East Fork Sycamore Creek near 226
  - West Fork above McFarland Canyon near 225
- Suspended, recoverable, definition of 14
- Suspended, total, definition of 14
- Sycamore Creek, East Fork, near Sunflower 226
  - West Fork above McFarland Canyon, near Sunflower 225
  - near Fort McDowell 227

- Tanque Verde Creek, near Tucson 300
- Taxonomy, definition of 14-15
- Techniques of water-resources investigations, publications on 29-30
- Terms, definition of 5-16
- Thermograph, definition of 15

Page
Titsink Canal, diversion by........................ 272,274
Tombstone, San Pedro River near.................... 162
Tons per acre-foot, definition of.................. 15
Tons per day, definition of........................ 15
Tonto basin, ground-water levels in................ 315
Tonto Creek above Gun Creek,
      near Roosevelt............................... 195
Topock Marsh, Inlet near Needles, CA............... 105
Total, definition of............................... 15
Total in bottom material, definition of............ 15
Total, recoverable, definition of.................. 15-16
Tritium network, definition of..................... 20
Tuba City, ground-water levels in.................. 315
Turkey Creek near Cleator.......................... 236
Twenty-One Mile wasteway, return surface
      flows by..................................... 285,288
Two-Forty-Two Well Field Lateral
      near San Luis................................ 286,288

Unit B Main Canal, diversion by.................... 271,274
Upper Salt River basin, ground-water levels in..... 315
Upper San Pedro basin, ground-water levels in...... 316
Upper Santa Cruz basin, ground-water levels in..... 316
Upper Verde River, ground-water levels in.......... 316

Vamori Wash at Kom Vo.............................. 294-295
Verde River, below Bartlett Dam.................... 221-224
  below Tangle Creek, above Horseshoe Dam.......... 216-219
  diversion for city of Phoenix from, near
      Fort McDowell................................ 228
  near Clarkdale................................... 204
  near Paulden..................................... 203
  near Scottsdale.................................. 229
  reservoir system on, at and
      below Horseshoe Dam.......................... 220
Verde River, Upper, ground-water
      levels in.................................... 316
Virden, NM, Gila River near........................ 142
Virgin River, above Halfway Wash near
      Riverside, NV................................ 73-74
  at Littlefield................................... 69-72
  ground-water levels in........................... 316
Virgin River basin, surface-water and water-
      quality records in........................... 69-74

WRD, definition of................................. 16
WSP, definition of................................. 16
Waddell Dam, Agua Fria River at.................... 244
  Agua Fria River below............................ 246-247
  Cottonwood Creek near............................ 243
  Lake Pleasant at................................. 245
Walapai Canal, diversion by........................ 272,274
Water analysis, explanation of..................... 26-27
Water levels in selected wells..................... 310-317
Water-quality records, explanation of.............. 26-28
Water-quality stations, map showing location of.... 32

Page
Water temperature, explanation of.................. 27
Waterman Wash near Buckeye......................... 300
Waterman Wash, ground-water levels in.............. 316
Well-numbering system in Arizona................... 18
Wellton-Mohawk Bypass Drain at Arizona-Sonora
      boundary, return surface flows by............ 285,288
Wellton-Mohawk Canal, diversion by................. 271,274
Wellton-Mohawk Main Outlet Drain, return
      surface flows by............................. 283,287
West Clear Creek near Camp Verde................... 209
West Main Canal wasteway, return surface
      flows by..................................... 286,288
Wet Beaver Creek near Rimrock...................... 300
Wet Bottom Creek near Childs....................... 213-215
Wet mass, definition of............................ 7
White Mountains, ground-water levels in............ 316
White River, East Fork, near Fort Apache........... 179
  near Fort Apache................................. 180
  North Fork, near McNary.......................... 178
Whitewater Draw basin, crest-stage, partial-
      record stations in........................... 301
  surface-water records in......................... 297
Whitewater Draw near Douglas....................... 301
Wikieup, Big Sandy River near...................... 109
Willcox basin, ground-water levels in.............. 316-317
Williamson Valley Wash near Paulden................ 202
Williamson Valley ground-water
      levels in.................................... 317
Willow Creek diversion from Black River,
      near Morenci................................. 149
Winkelman, Gila River at........................... 160
Winslow, Clear Creek near.......................... 58
Woodruff, Little Colorado River at................. 53

Yaqui Canal, diversion by.......................... 272,274
Yuma, Colorado River below Yuma Main Canal
      wasteway at.................................. 263
  municipal supply, diversion for.................. 273,274
  Wellton-Mohawk Main Outlet
      Drain near................................... 289-292
Yuma, ground-water levels in....................... 317
Yuma Main Canal, at siphon-drop powerplant,
      near Yuma.................................... 277
  below Colorado River siphon,
      at Yuma...................................... 279
  diversions from, between siphon-drop power-
      plant and Yuma Main Canal wasteway........... 272,274
  diversions from, for municipal supply
      for Yuma..................................... 273,274
Yuma Main Canal wasteway at Yuma................... 278
Yuma Mesa Outlet Drain,
      return surface flows by...................... 284,288

Zooplankton, definition of......................... 11-12
Zuni River above Black Rock
      Reservoir, NM................................ 47

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—574-372/85,069 REGION NO. 8

October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	$2.54x10^{1}$	millimeters (mm)
	$2.54x10^{-2}$	meters (m)
feet (ft)	$3.048x10^{-1}$	meters (m)
miles (mi)	$1.609x10^{0}$	kilometers (km)
	Area	
acres	$4.047x10^{3}$	square meters (m^2)
	$4.047x10^{-1}$	square hectometers (hm^2)
	$4.047x10^{-3}$	square kilometers (km^2)
square miles (mi^2)	$2.590x10^{0}$	square kilometers (km^2)
	Volume	
gallons (gal)	$3.785x10^{0}$	liters (L)
	$3.785x10^{0}$	cubic decimeters (dm^3)
	$3.785x10^{-3}$	cubic meters (m^3)
million gallons	$3.785x10^{3}$	cubic meters (m^3)
	$3.785x10^{-3}$	cubic hectometers (hm^3)
cubic feet (ft^3)	$2.832x10^{1}$	cubic decimeters (dm^3)
	$2.832x10^{-2}$	cubic meters (m^3)
acre-feet (acre-ft)	$1.233x10^{3}$	cubic meters (m^3)
	$1.233x10^{-3}$	cubic hectometers (hm^3)
	$1.233x10^{-6}$	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	$2.832x10^{1}$	liters per second (L/s)
	$2.832x10^{1}$	cubic decimeters per second (dm^3/s)
	$2.832x10^{-2}$	cubic meters per second (m^3/s)
gallons per minute (gal/min)	$6.309x10^{-2}$	liters per second (L/s)
	$6.309x10^{-2}$	cubic decimeters per second (dm^3/s)
	$6.309x10^{-5}$	cubic meters per second (m^3/s)
million gallons per day	$4.381x10^{1}$	cubic decimeters per second (dm^3/s)
	$4.381x10^{-2}$	cubic meters per second (m^3/s)
	Mass	
tons (short)	$9.072x10^{-1}$	megagrams (Mg) or metric tons

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
INT 413

U.S. DEPARTMENT OF THE INTERIOR
Geological Survey
Federal Building, 300 W. Congress
Tucson, AZ 85701

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

SPECIAL 4TH CLASS BOOK RATE